THE RELATIONSHIP BETWEEN THE USE OF SOCIAL NETWORKING SITES
AND STUDENT SPECTATOR BEHAVIOUR: A CASE OF UNIVERSITY SPORT IN
THE WESTERN CAPE

Kirby Krystle Phillips

3028685

A thesis submitted in fulfilment of the requirements for the degree of Magister Artium in
Sport, Recreation and Exercise Science, in the Department of Sport, Recreation and Exercise
Science, University of the Western Cape

Supervisor: Dr. Simone Titus

January 2019
ABSTRACT

Social networking sites are important communication tools used in different industries including the sports industry. Professional athletes, coaches, spectators, journalists, and broadcasters from nearly every sports code maintain a social media presence. The rapid growth in the use of social networks in sport and the challenging economic climate launched an urgent need for sport administration departments at universities to understand SNSs and how student spectators use these sites in the realm of university sport. This understanding serves as an attempt to enhance spectator attendance at university sports games through the use of SNSs by integrating these sites into marketing strategies. Sports spectators are key constituents of sports event attendance, however, little is known regarding whether a relationship exists between students’ activities on SNSs and their spectator behaviour. Subsequently, the purpose of this study was to examine and describe the relationship between the use of SNSs and student spectator behaviour in university sport by considering attendance, loyalty, trust, and commitment as determinants of behaviour. A quantitative methodological approach was adopted to collect data, using a cross-sectional research design. By applying a random sampling method, 540 full-time registered university students provided consent to participate in this study. An online survey was distributed to the entire student population, N=24000. All significance levels were set at p<0.05. Data were analyzed using the Statistical Package for Social Science (SPSS) V.25 software. Results showed statistical significance, p<0.00, for the relationship between the use of SNSs and student spectator behaviour during student spectator attendance of university sports games. No statistical significance was found in the relationship between the use of SNSs and student spectator behaviour before and after student spectator attendance of university sports games. These results suggest that greater investment should be placed in marketing through SNSs in order to develop, increase, and retain longstanding
relationships of loyalty, trust, and commitment with student spectators in the fast-growing segment of social media and spectatorship.

**Keywords:**

Social Networking Sites
Spectator Behaviour
Attendance
Loyalty
Trust
Commitment
University Sport
DECLARATION

I hereby declare that "The relationship between the use of social networking sites and student spectator behaviour: A case of university sport in the Western Cape" is my own work, that it has not been submitted before for any other degree or examination in any other university, and that the sources I have used have been indicated and acknowledged as complete references.

Kirby Krystle Phillips

January 2019

Signed
DEDICATION

I wish to dedicate this thesis to my family: my parents, Linda and James Phillips; my sisters, Lauren and Kim Phillips; my brother, Larry Phillips; and to my niece, Riley Hannah Phillips. Mom and dad, thank you for your unconditional love, unwavering support, and for providing for me a life of opportunity. To my siblings and niece, thank you for keeping me grounded, understanding the constant sacrifices, and for never leaving my side. I could not imagine my life without you.

I also wish to dedicate this thesis to my grandmothers, Mary Phillips and Barbara Williams, and to my aunt, Valerie Smith. Your struggle and sacrifices paved the way for me to earn this Master’s degree. You are women of strength. I thank you, I salute you, I celebrate you, and I love you. May you rest in peace and rise in glory.
ACKNOWLEDGEMENTS

I never thought I would make it through these two years of Post-Graduate studies. It was the ultimate test of my patience, strength, faith, health, knowledge, and commitment. I certainly would not have made it through without the amazing people in my life, and for that I wish to extend my sincerest gratitude.

All glory, honour, and praise to God for anointing my life and blessing me with the strength, courage, and tenacity to embark on this journey and complete this Master’s Thesis.

Furthermore, I wish to thank:

The Division of Post-Graduate Studies for the consistent hard work that ensures quality writing retreats and workshops, conducive working environments, providing access to writing and statistics coaches, and for supporting my journey over the last two years.

The Department of Sport, Recreation and Exercise Science for the opportunities to pursue a Master’s degree, teach the next generation of students, and for hosting me as a Research Intern.

The Interdisciplinary Centre of Excellence for Sports Science and Development for the opportunities that have enriched my life academically and professionally.

The National Research Foundation, Ada and Bertie Levenstein Bursary Fund, and the Department of Higher Education and Training for the financial support provided to me that made it possible to complete this thesis within the allocated timeframe.

The Erasmus Mundus Aesop+ Scholarship for affording me the unprecedented opportunity to study in Portugal and visit Spain.

Universidade do Porto, Faculdade de Psicologia e de Ciências da Educaçao for welcoming and hosting me at your university and faculty. Studying in Portugal was a dream come true.

Good Hope Metropolitan Community Church for the love, support, and prayers over the last three years. You all are my extended family.
Thank you to my aunts, uncles, cousins, and their kids, for the joy experienced every time we are together. You remind me of the love and laughter present in our family. I love you all.

A heartfelt thanks to my dear friend, Mpai Rampou. I firmly believe God brought you back home from America to – among many others – serve as my guardian angel throughout this journey. Thank you for being my friend, sounding board, critic, and support. I love you dearly.

My deepest gratitude to my friend, Warren Lucas. This journey started with you, a coffee date on 18 June 2016, endless conversation dissecting my interest in research, this topic, and you advising me in your greatest capacity. Thank you for your mentorship, guidance, and friendship. I love you, you inspire me. Jeremiah 29:11.

A very special thank you to my long-time friend, Adrian Atherton. I am grateful for our journey together over the years, to share in the experiences and joy of growing, learning, loving, heartbeat, healing, family, church, and moving forward. Thank you for teaching me life’s wonderful lessons. I love and appreciate you.

To my dearest Randall Smith and Stanley Jonck, you are blessings in my life! I appreciate your love, motivation, and you constantly checking up on me and whether I am well. Spending time with you is one of my treasures, I love you to the ends of the earth.

Thank you to my cousin and friend, Colleen Williams, for always keeping me in prayer, for your unfailing support, and constant belief in my ability to successfully achieve what I have set out to do. I am grateful for the hours of conversation we have had and your contribution to my growth. I love you always.

My sincerest thanks and appreciation is extended to my supervisor, Dr. Simone Titus. Thank you for your support and contribution to this research study. I am grateful for your support of my application to study abroad, despite limited time to complete this thesis. Thank you for everything, especially for taking that chance.
To Dr. Cornel Hart, Dr. Olushola Adeniyi, Dr. Kanayo Ogujiuba, Prof. Lorna Holtman, Peter Johnson-Smith, Leslie Jubelin, Kirk Haupt, Natasha Donn-Arnold, Omphile Mohutsiwe, and Thoko Shitshi, you are real-life heroes! I could never thank you enough for contributing to this journey and for ensuring the humour was never lost. I appreciate you and all your hard work.

A very big thank you to my statistics coach, Dr. Mwila Mulubwa. Your statistical expertise, guidance, and teaching is greatly appreciated. Thank you for your commitment and insight.

Dr. Olubunmi Oyekunle, I sincerely appreciate your humble critique, input, and for remaining steadfast in your objective perspective.

To the Community and Health Sciences Faculty Librarian, Karen Cook, I am deeply thankful to you for always going above and beyond the call of duty in patiently assisting me so warmly.

Dr. Barry Andrews, your advice, suggestions, and support is sincerely appreciated. Thank you for being there and listening.

To Prof. Lloyd Leach and Dr. Sunday Onagbiye, among the greatest teachers of integrity and humility, you too inspire me. May you always be blessed.

Makhaya Malema, I appreciate you offering your office to me as a solitude workspace, the laughter, stories shared, and the workshops attended with you are treasured moments that stretches beyond the lines of what is written in this thesis. It’s been an incredible ride!

Dr. Isabel Neves, words cannot articulate my gratitude to you for taking care of me during my time in Portugal. Your warmth was evident from your first email response. You are wonderful.

To all the ladies I befriended in Portugal, thank you for sharing in some of the best times of my life. You are incredible women. Keep shining.

A special thank you to the research assistants, Simamkele Vena, Nonhlanhla Mbeleni, and Tammy Joorst, for their hard work and commitment to the data collection phase of this study. Lastly, I wish to thank all the participants of this study; I would not have been able to complete it without you.
# TABLE OF CONTENTS

ABSTRACT .......................................................................................................................... ii
DECLARATION ....................................................................................................................... iv
DEDICATION .......................................................................................................................... v
ACKNOWLEDGEMENTS ...................................................................................................... vi
TABLE OF CONTENTS ......................................................................................................... ix
LIST OF FIGURES ............................................................................................................... xv
LIST OF TABLES ................................................................................................................ xvi
LIST OF ABBREVIATIONS ................................................................................................. xvii

CHAPTER ONE .................................................................................................................... 1
INTRODUCTION AND BACKGROUND OF THE STUDY ..................................................... 1
1.1 INTRODUCTION .......................................................................................................... 1
1.2 BACKGROUND OF THE STUDY ................................................................................. 1
1.3 STATEMENT OF THE PROBLEM ............................................................................... 5
1.4 RESEARCH QUESTION .............................................................................................. 6
1.5 AIM OF THE STUDY ................................................................................................... 6
1.6 OBJECTIVES OF THE STUDY .................................................................................... 6
1.7 SIGNIFICANCE OF THE STUDY ............................................................................... 7
1.8 INTERPRETATION OF KEY TERMS .......................................................................... 8
1.9 SUMMARY OF RESEARCH METHODOLOGY ......................................................... 9
1.10 OVERVIEW OF CHAPTERS ..................................................................................... 10

CHAPTER TWO ................................................................................................................... 12
REVIEW OF LITERATURE .................................................................................................. 12
2.1 INTRODUCTION ........................................................................................................ 12
2.2 SOCIAL MEDIA AND SOCIAL NETWORKING SITES IN SPORT ............................. 12
2.3 THE GROWTH AND EVOLUTION OF SOCIAL NETWORKING SITES IN SPORT

2.4 THE USE OF SOCIAL NETWORKING SITES IN SPORT

<table>
<thead>
<tr>
<th>Social Networking Site</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>18</td>
</tr>
<tr>
<td>Twitter</td>
<td>19</td>
</tr>
<tr>
<td>Instagram</td>
<td>20</td>
</tr>
<tr>
<td>WhatsApp</td>
<td>22</td>
</tr>
<tr>
<td>YouTube</td>
<td>23</td>
</tr>
<tr>
<td>Snapchat</td>
<td>24</td>
</tr>
<tr>
<td>Pinterest</td>
<td>26</td>
</tr>
</tbody>
</table>

2.5 SOCIAL NETWORKING SITES IN INTERCOLLEGIATE ATHLETICS

2.6 SPECTATOR BEHAVIOUR

<table>
<thead>
<tr>
<th>Spectator Behaviour</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance</td>
<td>31</td>
</tr>
<tr>
<td>Loyalty</td>
<td>32</td>
</tr>
<tr>
<td>Trust</td>
<td>34</td>
</tr>
<tr>
<td>Commitment</td>
<td>35</td>
</tr>
</tbody>
</table>

2.7 UNIVERSITY SPORT

2.8 THEORETICAL FRAMEWORK: DECISION-MAKING PROCESS FOR SPORT INVOLVEMENT MODEL

<table>
<thead>
<tr>
<th>Decision-Making Process</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need recognition</td>
<td>41</td>
</tr>
<tr>
<td>Awareness or Information search</td>
<td>41</td>
</tr>
<tr>
<td>Evaluation of choices</td>
<td>41</td>
</tr>
<tr>
<td>Purchase decision</td>
<td>42</td>
</tr>
<tr>
<td>Sport experience</td>
<td>42</td>
</tr>
<tr>
<td>Evaluation of experience</td>
<td>43</td>
</tr>
<tr>
<td>Post-evaluation behaviour</td>
<td>43</td>
</tr>
</tbody>
</table>

2.9 CHAPTER CONCLUSION

CHAPTER THREE
# METHODOLOGY

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 INTRODUCTION</td>
<td>45</td>
</tr>
<tr>
<td>3.2 RESEARCH METHOD</td>
<td>45</td>
</tr>
<tr>
<td>3.3 RESEARCH DESIGN</td>
<td>46</td>
</tr>
<tr>
<td>3.4 RESEARCH SETTING</td>
<td>47</td>
</tr>
<tr>
<td>3.5 POPULATION AND SAMPLE</td>
<td>47</td>
</tr>
<tr>
<td>3.5.1 Population</td>
<td>47</td>
</tr>
<tr>
<td>3.5.2 Sampling</td>
<td>48</td>
</tr>
<tr>
<td>3.5.2.1 Sampling technique</td>
<td>48</td>
</tr>
<tr>
<td>3.5.2.2 Determination of the sample size</td>
<td>48</td>
</tr>
<tr>
<td>3.6 RESEARCH INSTRUMENT</td>
<td>49</td>
</tr>
<tr>
<td>3.7 DATA COLLECTION PROCEDURE</td>
<td>50</td>
</tr>
<tr>
<td>3.7.1 Data collection for research study</td>
<td>50</td>
</tr>
<tr>
<td>3.7.2 Pilot study</td>
<td>51</td>
</tr>
<tr>
<td>3.8 VALIDITY AND RELIABILITY</td>
<td>51</td>
</tr>
<tr>
<td>3.8.1 Validity</td>
<td>52</td>
</tr>
<tr>
<td>3.8.2 Reliability: Internal consistency</td>
<td>52</td>
</tr>
<tr>
<td>3.9 STATISTICAL ANALYSIS OF DATA</td>
<td>52</td>
</tr>
<tr>
<td>3.10 ETHICS CONSIDERATIONS</td>
<td>53</td>
</tr>
<tr>
<td>3.11 CHAPTER CONCLUSION</td>
<td>54</td>
</tr>
</tbody>
</table>

# CHAPTER FOUR

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESULTS</td>
<td>55</td>
</tr>
<tr>
<td>4.1 INTRODUCTION</td>
<td>55</td>
</tr>
<tr>
<td>4.2 SECTION A: DEMOGRAPHIC PROFILE OF PARTICIPANTS</td>
<td>55</td>
</tr>
<tr>
<td>4.3 SECTION B: RESULTS FOR STUDY OBJECTIVES</td>
<td>63</td>
</tr>
<tr>
<td>4.3.1 SNSs used by student spectators</td>
<td>63</td>
</tr>
<tr>
<td>4.3.2 SNSs and student spectator attendance</td>
<td>64</td>
</tr>
</tbody>
</table>
4.3.3 SNSs and student spectator loyalty ......................................................... 65
4.3.4 SNSs and student spectator trust ............................................................... 66
4.3.5 SNSs and student spectator commitment .................................................. 67
4.3.6 SNSs and student spectator behaviour ...................................................... 68

4.4 SECTION C: RESULTS BASED ON THE DECISION-MAKING PROCESS FOR
SPORT INVOLVEMENT MODEL ........................................................................ 70
  4.4.1 Awareness or Information search ............................................................. 70
  4.4.2 Sport experience ..................................................................................... 71
  4.4.3 Evaluation of experience ....................................................................... 71
  4.4.4 Post-evaluation behaviour ...................................................................... 72

4.5 SUMMARY OF RESULTS ............................................................................. 73

4.6 CHAPTER CONCLUSION ................................................................................ 74

CHAPTER FIVE ..................................................................................................... 75

DISCUSSION, SUMMARY OF FINDINGS, RECOMMENDATIONS, AND
CONCLUSION ....................................................................................................... 75

5.1 INTRODUCTION ............................................................................................. 75

5.2 SECTION A: DISCUSSION, SUMMARY OF FINDINGS, AND CONCLUSIONS FOR
STUDY OBJECTIVES ......................................................................................... 77

5.2.1 DISCUSSION OF RESULTS FOR STUDY OBJECTIVES ............................... 77
  5.2.1.1 SNSs used by student spectators ......................................................... 77
  5.2.1.2 SNSs and student spectator attendance .............................................. 78
  5.2.1.3 SNSs and student spectator loyalty .................................................... 80
  5.2.1.4 SNSs and student spectator trust ......................................................... 81
  5.2.1.5 SNSs and student spectator commitment ........................................... 83
  5.2.1.6 SNSs and student spectator behaviour .............................................. 84

5.2.2 SUMMARY OF FINDINGS FOR STUDY OBJECTIVES ............................ 85
  5.2.2.1 SNSs used by student spectators ......................................................... 85
5.3.3 CONCLUSIONS RELATED TO THE SUMMARY OF FINDINGS FOR DECISION-MAKING PROCESS FOR SPORT INVOLVEMENT MODEL ........................................... 99

5.3.3.1 Student spectators’ awareness of university sports games .................................. 99
5.3.3.2 Student spectators’ experience of university sports games .................................. 100
5.3.3.3 Student spectators’ feelings after attending university sports games .................. 100
5.3.3.4 Student spectators’ satisfaction with university sports’ SNSs ............................ 100

5.4 RECOMMENDATIONS .............................................................................................. 101

5.4.1 Recommendations for practice ........................................................................... 101
5.4.2 Recommendations for further research .............................................................. 102

5.5 LIMITATIONS OF THE STUDY ............................................................................. 103

5.6 STUDY CONCLUSION ............................................................................................ 104

REFERENCES .............................................................................................................. 105

APPENDICES .............................................................................................................. 120

APPENDIX A: Information sheet ................................................................................ 120
APPENDIX B: Consent form ....................................................................................... 123
APPENDIX C: Survey .................................................................................................. 124
LIST OF FIGURES

Figure 2.1 Decision-Making Process for Sport Involvement model ........................................... 40
LIST OF TABLES

Table 4.1 Demographic information of participants..........................................................57
Table 4.2 Internet access of participants........................................................................59
Table 4.3 Student spectators' visits on SNSs .................................................................60
Table 4.4 Average time spent on SNSs .........................................................................60
Table 4.5 Activities performed on SNSs ......................................................................61
Table 4.6 Frequencies for SNSs used by student spectators in university sport..............63
Table 4.7 Correlation matrix for SNSs and student spectator attendance ......................64
Table 4.8 Linear regression analysis for SNSs and student spectator attendance ............65
Table 4.9 Correlation matrix for SNSs and student spectator loyalty .............................65
Table 4.10 Linear regression analysis for SNSs and student spectator loyalty ...............66
Table 4.11 Correlation matrix for SNSs and student spectator trust ..............................66
Table 4.12 Linear regression analysis for SNSs and student spectator trust ..................67
Table 4.13 Correlation matrix for SNSs and student spectator commitment ...................67
Table 4.14 Linear regression analysis for SNSs and student spectator commitment ..........68
Table 4.15 Pearson chi-square matrix for SNSs and student spectator behaviour ..........68
Table 4.16 Attendance of university sports games and information ...............................70
Table 4.17 Student spectators' experience of university sports games ...........................71
Table 4.18 Student spectators' feelings after attending university sports games ..............71
Table 4.19 Student spectators' satisfaction with university sport's SNSs .......................72
LIST OF ABBREVIATIONS

SNSs    Social Networking Sites
NBA     National Basketball Association
NFL     National Football League
MLB     Major League Baseball
MLS     Major League Soccer
NCAA    National Collegiate Athletic Association
USSA    University Sport South Africa
NLDF    National Lotteries Distribution Fund
SASCOC  South African Sports Confederation and Olympic Committee
SASSU   South African Student Sports Union
USC     University Sports Council
NPO     Non-Profit Organization
CHAPTER ONE

INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 INTRODUCTION

This chapter outlines the background for the study topic and provides insight into the history and growth of using social networking sites (SNSs) in sport by providing an overview of social media in sport, identifying users of SNSs within the sport industry, identifying SNSs used in the sport industry, and the reasons for using SNSs in sport. The aim, objectives, and the study’s research question is detailed. The problem statement of this study, significance, and an interpretation of key terms follows with an outline of each chapter of the thesis. This chapter ends with a chapter conclusion.

1.2 BACKGROUND OF THE STUDY

Over the past two decades, the subject and growth of social media have been exponential, along with its relevance to the sports marketing industry (Green, 2016). In recent history there has been a fundamental shift in relation to the tools and strategies used by sports properties to communicate with customers and fans through the emergence of a phenomenon known as social media (Green, 2016). On that account the impact of social media on the current media landscape is undeniable (Boehmer & Lacy, 2014). Social media has also said to rival traditional media in the realm of sports (Boehmer, 2016) by profoundly impacting the delivery and consumption of sport (Filo, Lock, & Karg, 2015). Since the use of social media is an increasingly popular activity for internet users (Filo et al., 2015) sports is ranked among the most read topics on social media (Mitchell & Page, 2013). This demonstrates that social media use is a phenomenon that has grown rapidly in the sports industry over the past decade.
Social media have gained significant importance in the sports media ecosystem (Boehmer, 2016), thus social media platforms are concluded to be “causing a paradigm shift in the management of sport media relations and flattening the sports media hierarchy” (Gibbs & Haynes, 2013, p. 405).

The rise in social media has not gone unnoticed in the world of professional sport (Pegoraro, 2010) allowing for heightened interaction between athletes and their fans (Sanderson, 2010). Social media have become major places to encounter news, with media organizations, sports teams, and athletes allocating significant resources to harness these new tools and gaining substantial followings (Boehmer, 2016). In their very short history, social media have had a profound effect on sport, as many leagues, teams, and athletes have embraced these platforms (Pegoraro, 2010). The widespread adoption of social media among both professional communicators and their audiences has opened up new lines of communication between fans, teams, and athletes (Boehmer & Lacy, 2014). Diverse social media platforms are used by sport organizations (Sellitto, 2014), college athletes (Browning & Sanderson, 2012), and professional athletes in an attempt to raise interactivity levels among sports fans (Billings, Qiao, Conlin, & Nie, 2017).

Subsequently, social media technologies are said to provide new ways for fans to interact with sport celebrities (Sanderson, 2010), and attract millions of users while becoming an especially popular medium in the sports industry (Madden & Zickuhr, 2011). Researchers found athletes, cyclist Lance Armstrong, tennis player Andy Roddick, basketball player Shaquille O’Neal, converse through SNSs (Hambrick, Greenhalgh, Simmons, & Greenwell, 2010) providing fans with a real, unmediated look into their lives (Kassing & Sanderson, 2010). These findings suggest that SNSs area being used more frequently by athletes as a tool to communicate with fans (Pedersen, Miloch, & Laucella, 2007), and for that reason sport teams and athletes embraced social media at a very rapid pace (Pegoraro & Jinnah, 2012).
Researchers identified commonly used SNSs such as: Twitter, a “conversational” source of information which is more appropriate for fan engagement through its live nature (Kietzmann, Hermkens, McCarthy, & Silvestre, 2011) while Facebook is used to provide longer pieces of content, post pictures, and promote upcoming events (Green, 2016). One social media platform that is currently reshaping the nature of fan-athlete interaction is Twitter (Frederick, Lim, Clavio, Pedersen, & Burch, 2014). Athletes, coaches, and broadcasters from nearly every sport maintain a Twitter presence, which allows sports fans to obtain immediate information directly from these sports figures (Browning & Sanderson, 2012). Twitter is the “place” for instant breaking sports news (Sanderson & Hambrick, 2012) and has made considerable inroads in the sports communication landscape since its introduction in 2006 (Clavio & Kian, 2010). The growth of Twitter has been noticed in the sports industry; it is now a common place to hear about athletes who “tweet” or upload photos related to hobbies, eating habits, or even providing support for a political cause (Green, 2016).

Due to the popularity of social media, sports brands invest significant time and resources to drive engagement and relationships online (Filo et al., 2015). Specific papers have documented how international athletes have used social media to develop aspects of a personal brand (Frederick et al., 2014; Hull, 2014; McEnnis, 2013; Frederick, Hoon Lim, Clavio, & Walsh, 2012; Lebel & Danylchuk, 2012). Mega events such as the SuperBowl, FIFA World Cup, and the Olympics; professional teams such as Manchester United and Real Madrid; and brands including Converse, Lionel Messi, and Cristiano Ronaldo, expend significant resources to integrate social media practices into their marketing strategy (Filo et al., 2015).

The potential benefits of social networking can be linked to relationship marketing (Grönroos, 2004) which can help strengthen and leverage relationships, endorse causes, sponsors or products, or demonstrate a capacity for reflection instead of just action (Ik Suh, Lim, Hee Kwak, & Pedersen, 2010). Sports teams are capitalizing on Twitter’s popularity and have
integrated Twitter into their promotional and marketing activities, such as tweeting clues to guide fans on a scavenger hunt for free game tickets (Browning & Sanderson, 2012). One reason for Twitter’s popularity is the increased access it gives fans to athletes and sports figures (Sanderson, 2011). As a form of communication, which enables quick and dynamic interaction (Fischer & Reuber, 2011), Twitter provides athletes with the opportunity to showcase their personalities (Tinley, 2009). Within social networks athletes have direct contact with the end users, providing them with the opportunity to generate planned advertising or sales promotions (Green, 2016).

Well known athletes like Cristiano Ronaldo who promotes global initiatives, Kobe Bryant who shares personal photos, Rafael Nadal who imparts emotional experiences, and Russell Wilson who raises awareness of underprivileged children have all used social networks to connect with fans and develop effective personal branding (Green, 2016). Professional cyclist Lance Armstrong once invited his fans to meet him for a ride around Dublin after completing the Tour of Ireland where 1 000 fans showed up hours later (Frederick et al., 2014). Antonio Brown, a wide receiver for the Pittsburgh Steelers, tweeted when he would arrive in Indianapolis for the SuperBowl (Rovell, 2012). A fan tweeted back to Brown and invited him to lunch. Brown responded and they ended up spending the whole day together (Rovell, 2012). Professional basketball player, Allen Iverson, utilized Twitter in order to keep fans abreast of trade rumours (Sheridan, 2009). Michael Beasley, another professional basketball player, posed a photo of one of his tattoos on Twitter, which described his depression and thoughts of suicide (Frederick et al., 2014). Twitter accounts of 49 athletes were examined over a 7-day period, indicating a high percentage of tweets were responded directly to fans (Pegoraro, 2010). Through the development of social media, athletes can now introduce followers to increasingly intimate elements or perspectives of their everyday lives (Green, 2016). Previous research (Frederick et al., 2014; Hull, 2014; Pegoraro & Jinnah, 2012; Kassing & Sanderson, 2010; Pegoraro, 2010)
suggests that athletes discuss their personal (backstage) rather than their professional (front stage) lives through interaction, offering behind the scenes access and differentiating a personal brand through direct communication with fans (Green, 2016).

Social media is said to have become an unavoidable part of the current college experience (Browning & Sanderson, 2012). A significant, positive relationship was found between college students’ attitude about sharing information and the frequency with which they used Facebook and Twitter (McKinney, Kelly, & Duran, 2012). Using social media does not require a great financial investment, and the relatively low cost is certainly a benefit of utilising online social media as a marketing communications tool (Michaelidoua, Siamagka, & Christodoulides, 2011). Several of the student-athletes also disclosed that they used Twitter to find out what people were saying about them after games (Browning & Sanderson, 2012).

A paucity of literature and evidence of research exists in the area of SNSs and university sport in South Africa. In a bid to contribute towards the filling of these gaps and to enrich scholarly discourse surrounding social networking and student spectators, this study aims to examine and describe the relationship between the use of social networking sites and student spectator behaviour in university sport. Subsequently, this study will contribute to the body of context specific knowledge about the use of SNSs at varsity sport in South Africa. Thus, this study seeks to contribute knowledge that will enhance our understanding to effectively use SNSs to increase student spectator attendance at university sports games.

1.3 STATEMENT OF THE PROBLEM

Social media is fundamentally changing the nature of sports media consumption (Hull & Lewis, 2014). As a result of the overall growth of social media, more fans are using social media at live sports events (Jensen & Limbu, 2016). Media organizations, teams, and athletes
increasingly turn to social media to engage their audiences. In the case of university sport, SNSs allow athletic departments to keep fans updated with the latest news and information, by providing fans with access to insider information that might not be reported by traditional media outlets (Kassing & Sanderson, 2010).

With the continuous increase in the use of SNSs in sport, the influence of this growth on university students’ spectator behaviour cannot be underestimated. However, the orientation of students in terms of their behaviour is not understood with respect to determining whether a relationship exists between students’ activities on SNSs and their spectator behaviour. Specifically, students’ behaviour in terms of attending university sports games, demonstrating loyalty toward university sport, students’ level of trust toward information shared on university sport’s SNSs, and students’ commitment expressed toward supporting university sports teams. Moreover, studies have not comprehensively examined the use of SNSs and student spectator behaviour in university sport.

**1.4 RESEARCH QUESTION**

The descriptive question that guided this study was, “how does the use of social networking sites influence student spectator behaviour in university sport?”

**1.5 AIM OF THE STUDY**

The aim of this study was to examine and describe the relationship between the use of social networking sites and student spectator behaviour in university sport.

**1.6 OBJECTIVES OF THE STUDY**

The objectives of the study were to:

1. Identify the social networking sites used by student spectators.
2. Determine the relationship between the use of social networking sites and student spectator attendance at university sports games.

3. Determine the relationship between the use of social networking sites and student spectator loyalty toward university sports.

4. Determine the relationship between the use of social networking sites and student spectator trust of information shared on university sports’ social networking sites.

5. Determine the relationship between the use of social networking sites and student spectator commitment to supporting university sports teams.

6. Describe the relationship between social networking sites and student spectator behaviour.

1.7 SIGNIFICANCE OF THE STUDY

According to the Institutional Operating Plan (IOP) 2016-2020 White Paper document, the higher education institution researched in this study particularly benefits from its results. Enabling goal area six, enhancing the institution’s standing and profile, strives to shape the internal and external standing and profile of the institution as a vibrant, research-led institution through the use of various communication and marketing strategies. The achievement of this goal is embedded in the three strategies employed that includes Strategy 2, the establishment of an integrated communication strategy across all role players; Strategy 3, developing a content management plan to give prominence to the institution’s strategic intent, high-led achievements and to enhance its reputation; and, Strategy 4, pay careful attention to a coordinated branding and marketing programme (IOP, 2016).

Strategy two of goal area six outlines the adoption of an integrated communication strategy that focuses on the overall institutional goals, the role and contributions of staff in public relations, marketing, advertising, recruitment, and communication must be acknowledged,
along with the need for these sections to work as a mutually supportive team with a coordinated agenda. Strategy three of goal area six considers planning and implementing a comprehensive communication and marketing campaign that takes account of the respective internal and external audiences. In collaboration with the previous two strategies, strategy four of goal area six states that the more material will become mobile-friendly, anticipating that the institution will attract significant interest from a wider internal and external audience, continuing to promote the institution’s brand on its website and through multiple social media channels (IOP, 2016).

With respect to the aforementioned goal, the results of this study will directly benefit the higher education institution in achieving IOP goal six. In addition, the results of this study may directly guide our understanding of effectively using SNSs for the benefit of university sport. Knowing and understanding sports spectator involvement also helps college athletic departments accurately segment their target market and effectively evaluate their marketing efforts, because spectator involvement has a powerful influence on the level of attendance (Milne & McDonald, 1999).

1.8 INTERPRETATION OF KEY TERMS

**Social Networking Sites** are web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made within the system (Boyd & Ellison, 2007).

**Sports spectators** are those individuals who witness a sporting event in person or through some form of media (Wann, Melnick, Russel, & Pease, 2001). Spectators of collegiate sports are a unique group of individuals whose consumer behaviours are considered to be different from typical consumers (Ferreira & Armstrong, 2004).
Attendance at sports events represents a significant revenue stream for sports venues and sporting associates with subsequent economic benefits for cities and regions (Hall, O’Mahony, & Vieceli, 2010).

Loyalty is a highly developed attitude that is persistent, resistant to change, creates biases in cognitive processing and provides a guide to behaviour (Funk & James, 2001).

Trust is the degree of confidence and reliability individuals feel within service relationships (Grossman, 1998).

University sport in South Africa is governed by University Sport South Africa (USSA), the official unified national umbrella sports structure for the regulation, organisation, and coordination of student sports activities at regional, provincial, and national levels in the higher education sector of South Africa (University Sports South Africa, 2017).

1.9 SUMMARY OF RESEARCH METHODOLOGY

A more detailed explanation of the methodological considerations is offered in Chapter Three. What follows is a summary of the research methodology in order to provide the reader with an overview of the relationship between the purpose of this study and the research approach and methods adopted.

A quantitative approach was considered to be the most appropriate for this study because it allowed the researcher to effectively examine the relationship between the use of SNSs and student spectator behaviour. Data analyses and findings of this study have been interpreted using the study’s applied theoretical framework, using the Decision-Making Process for Sport Involvement model as a lens to present results for discussion. The Decision-Making Process
for Sport Involvement model has been utilized to ascertain SNSs influence on student spectators’ decision-making to attend university sports games.

University students answered surveys with regard to their use of SNSs for university sport. Online surveys were the instrument used. Data were analyzed using the Statistical Package for Social Science (SPSS) version 25 software. Chapter Three provides a detailed description of the research methodology applied to this study.

1.10 OVERVIEW OF CHAPTERS

The layout of this thesis is as follows:

**Chapter One** outlines the background of the study, providing a brief overview of SNSs, student spectator behaviour, and university sport. The statement of the problem is presented, as well as the research question, research aim, and objectives, followed by the significance of this study. A summary of the research methodology is presented, an interpretation of key terms is provided, and an overview of chapters in this thesis is presented.

**Chapter Two** provides a literature review focusing on important concepts for the purpose of this study. The review of literature presents descriptions of SNSs, student spectator behaviour, attendance, loyalty, trust, commitment, and university sport. Chapter two also presents the theoretical framework for this study, the Decision-Making Process for Sport Involvement model.

**Chapter Three** describes the research methodology used in this study. This study is quantitative in its approach and the data collection and data analyses are presented. Online surveys are revealed as the research instrument. This chapter outlines the selection of
participants, description of the research setting, data collection procedure, as well as ethical considerations.

**Chapter Four** represents the results of this research study. It shows the participants’ use of SNSs in university sport as a result of frequency, correlation, and regression analyses. The results of this study is presented in three sections. Section A – Demographic information of participants. Section B – Results for Study Objectives. Section C – Results for Decision-Making Process for Sport Involvement model.

**Chapter Five** offers a discussion, conclusion, limitations, and recommendations for practice with regard to the relationship between the use of SNSs and student spectator behaviour in university sport. This chapter reveals the researcher’s efforts to interpret the results using the Decision-Making Process for Sport Involvement model. The researcher also provides recommendations for further research. References and appendices follow this chapter.

**1.1 CHAPTER CONCLUSION**

This chapter contextualizes the topic under investigation which is to gain insight into the relationship between the use of SNSs and student spectator behaviour in university sport. A background of literature is provided in this chapter to serve as a support to the research inquiry. The problem observed was presented as a statement, and the significance of the problem was described. This chapter also stated the research question, the aim, and objectives of the study.

Chapter two which follows provides a review of the literature on the topics of social networking, spectator behaviour, university sport, and highlights the theoretical framework adopted for this study, from various studies and authors.
CHAPTER TWO

REVIEW OF LITERATURE

2.1 INTRODUCTION

This chapter provides a review of the literature with regards to social networking sites and its relationship to student spectator behaviour in university sport. An overview of social networks, including its growth and evolution in sport, an understanding of how these social networking sites are used in sport, and social networking sites within university sport, are presented. Thereafter follows a discussion of student spectator behaviour and the behavioural determinants considered in this study, attendance, loyalty, trust, and commitment. A theoretical framework is provided as a lens to contextualise this study. This review of literature ends with a chapter conclusion.

A review of literature is the background to the research under investigation (Gratton & Jones, 2004). The review of literature is essential as it avoids replication of the study and findings, provides a source of problem of the study, and assists researchers to be up-to-date regarding the information about the literature related to their own problem already done by others (Singh, 2006). It serves the purpose to share with the reader the results of other studies that are closely related to the one being undertaken by providing a framework for establishing the importance of the study, as well as a benchmark for comparing the results with other findings (Creswell, 2014).

2.2 SOCIAL MEDIA AND SOCIAL NETWORKING SITES IN SPORT

At first glance, social media is about conversations and relationships; it facilitates the development of relationships between individuals and organizations through its use as a
communication tool (Israel, 2009). However, a detailed analysis reveals that social media employs mobile and web-based technologies to create highly interactive platforms via which individuals and communities share, co-create, discuss, and modify user-generated content (Kietzmann et al., 2011).

Social media has been defined as the tools, platforms, and applications that enable consumers to connect, communicate, and collaborate with others (Williams & Chinn, 2010) as well as a group of internet-based applications that allow the creation and exchange of user-generated content (Kaplan & Haenlein, 2010). Previous research explains that social media can be broken down into three parts: media (physical, electronic, or verbal), concept (art or information), and social interface (intimate, direct, or community engagement); a three-part exchange that allows for a wide variety of instantaneous content to be shared to the masses (Kaplan & Haenlein, 2010). These three parts of social media extend into six types: social networks such as Facebook and LinkedIn, bookmarking sites such as Delicious and StumbleUpon, social news such as Digg and Reddit, media sharing such as YouTube and Flickr, microblogging such as Twitter, as well as blog comments and forums (Grahl, 2013). For the purpose of this research, only social networks, media sharing, and microblogging will holistically be referred to as social networking sites (SNSs).

Of social media platforms, social networking sites appear to be among the most widely adopted (Mahan, Seo, Jordan, & Funk, 2015) as they are used for multiple purposes and have become an essential part of our everyday activities (Rousseau & Puttaraju, 2014). Defined as web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, (3) view and travers their list of connections and those made by others within the system (Boyd & Ellison,
social networking sites has been described as content that is generated by its audience as opposed to being generated by media companies or publishing houses (Fischer & Reuber, 2011). General motives for the use of SNSs include finding old friends, passing time, entertainment, finding information, and sharing news (Mirani, 2011), making new friends, finding potential dates, and relationship maintenance (Muscanell & Guadagno, 2012), as well as academic purposes (Mazman & Usluel, 2011). Contrary to the motives for using SNSs, previous research suggests that a lack of experience, limited time, and inadequate IT skills prohibits the use of SNSs (Rousseau & Puttaraju, 2014). Despite some challenges the overall benefits of using SNSs supersedes the trials of these tools as a result of its convenience and its free nature that makes it possible to connect with people (Kuzma, Bell, & Logue, 2014). However, despite some challenges for using SNSs, higher levels of user engagement indicate that SNSs have become a significant means of communicating, networking, building, and maintaining personal or business relationships (Rousseau & Puttaraju, 2014).

In sport, professional sports teams are drawn to SNSs as a way to reach new and foster existing relationships as a result of its availability and usage (Pronschinske, Groza, & Walker, 2012). Unlike traditional media like print or television, social media allows sports fans to talk to each other online and their team preference, and may increase fans’ identification with their team further, as well as their feeling of being part of a group (Haught, Willis, Furrow, Morris III, & Freberg, 2016). Social networking sites have empowered consumers to take active roles as both marketers and advertisers of their team or other favourite products and brands (Chu & Kim, 2011; Sheehan & Morrison, 2009). These new founded roles prove that the introduction of SNSs in sport ignited a shift in the content distributed by sports teams that occurred more frequently through Facebook, Twitter, and YouTube (Gibbs & Haynes, 2013). Sport organizations have implemented marketing strategies to better develop customer relationships
through the use of SNSs (Dixon, Martinez, & Martin, 2015). When leveraged properly, social media can allow sports organizations to build fan participation and interaction, drive traffic to their official website and even develop sponsor programmes to increase revenue (Cheong & Cheong, 2011). Considering the arrival of SNSs, it is evident that its use within sport is increasing and revolutionizing the way the sport industry operates.

2.3 THE GROWTH AND EVOLUTION OF SOCIAL NETWORKING SITES IN SPORT

Social media has shifted sports news from a one-way to a two-way avenue (Sanderson & Hambrick, 2012) resulting in the profound impact the advent of social media technologies has had on the world of sport (Sanderson, 2011). In less than a decade, social media platforms have women their way into the cultural fabric of sports, effectively altering the very nature of sport-based communication (Clavio & Frederick, 2014). Rapidly becoming standard infrastructure, this innovation has transformed the way sports are bother reported (Schultz & Sheffer, 2010; Sheffer & Schultz, 2010) and consumed (Clavio & Kian, 2010; Kassing & Sanderson, 2010). The emergence of social media gives organizations the ability to significantly affect connections with customers (Griffiths, 2008) and, for sports organizations, further expand their fan base (Kuzma et al., 2014).

Due to their ability to impact interaction among vested constituencies, sports organizations have begun to utilize social media to further their communication and marketing efforts (Coyle, 2010). Social media technologies are said to provide new ways for fans to interact with sports celebrities (Sanderson, 2010). Fans do not want to wait for the 5 o’clock news to get their sports information if they can get it instantly through social media (Van Scott, 2013). Sports
organizations rely on loyal consumers that purchase tickets and merchandise repeatedly (Dixon et al., 2015). It is in this sense that social media implementation allows organizations to better develop relationships between consumers and the organisation (Williams & Chinn, 2010).

2.4 THE USE OF SOCIAL NETWORKING SITES IN SPORT

In order to study sports organizations, we need to first understand the general organisation’s use of social media (Wang, 2014). Organizations seem to employ new media for at least two primary purposes: information-sharing and dialogic relationship-building (Wang, 2014). Social media has been used to nurture consumer relationships with sports organizations (J. Williams & Chinn, 2010), notably through major professional leagues in the United States such as the National Basketball Association (NBA), National Football League (NFL), Major League Baseball (MLB), and Major League Soccer (MSL) (Witkemper, Lim, & Waldburger, 2012). Sports organizations have increasingly used social media to build professional, personal, and community relationships with fans via sharing information and promoting products by utilising several types of communication tools such as retweets, public messages, hyperlinks, and hashtags (Wang, 2014). Three primary social media platforms have been identified as the most frequently employed by sports organisation: Facebook, YouTube, and Twitter, with the latter as the most popular (Witkemper et al., 2012) reporting 21.4 and 9.8 million Twitter followers for global superstar athletes Cristiano Ronaldo and LeBron James, respectively (Gibbs & Haynes, 2013).

It is then not surprising that sports teams are capitalizing on Twitter’s popularity and have integrated Twitter into their promotional and marketing activities such as tweeting clues to guide fans on a scavenger hunt for free game tickets (Browning & Sanderson, 2012). The use
of Facebook by the NFL teams have also been examined (Waters, Burke, Jackson, & Buning, 2010). Facebook as a brand-management tool in the National Collegiate Athletic Association (NCAA) and in the Big 12 Athletic Conference (Wallace, Wilson, & Miloch, 2011), as well as the relationship between the page attributes found on Facebook pages of professional sports teams and fan participation (Pranschinske et al., 2012) proved that Facebook is commonly used in the sports industry. Since athletes greatly rely on their public image, public perception can play a significant role in the athletes’ ability to obtain endorsements and leverage sports teams when seeking to re-negotiate contracts, which motivated researchers to examine the Instagram feeds of 27 professional athletes to determine how athletes use Instagram for self-presentation (Smith & Sanderson, 2015). Themes that emerged from the aforementioned study are highlighted in section 2.4.3 below.

By utilising content analysis, previous researchers sought to examine whether sports organisation, MSL, could use YouTube to practice agenda-setting, that is the attempt to manipulate messages contained in media, through posting certain kinds of videos (Zimmerman, Clavio, & Lim, 2011). Results showed agenda-setting was accomplished on a small scale and it could be accomplished on a larger scale by using YouTube (Zimmerman et al., 2011). Social networking site newcomer, Snapchat, was studied in a sports context alongside four other existing SNSs including Facebook, Twitter, Instagram, and Pinterest, where the use of Snapchat to follow sports did not significantly differ from Facebook, however, Snapchat was used significantly more than its competitors (Billings et al., 2017). Snapchat allows teams to use the application in order to establish connections to fans who feel more personal than other social media competitors (Billings et al., 2017). Another SNS that presents an opportunity for sports organizations to connect and build communities with fans is Pinterest. A study conducted in 2015 examined how North American professional sports leagues used Pinterest
over a one-year time period to communicate and interact with fans, and encourage their engagement, reported that sports teams used Pinterest to promote fan group experience, provide team and game information, and sell-team related merchandise (Hambrick & Kang, 2015).

Continued research explored how sports organizations (Pronschinske et al., 2012; Wallace et al., 2011; Waters et al., 2010), athletes (Hambrick & Mahoney, 2011; Sanderson, 2011; Hambrick et al., 2010; Kassing & Sanderson, 2010; Pegoraro, 2010), and fans (Clavio & Kian, 2010) use social media, attributing its use to engage in dialogues and to establish relationships with their respective audiences (Blaszka, Burch, Frederick, Clavio, & Walsh, 2012). Concluding that SNSs have changed the traditional way athletes interact with their fans, and could help athlete users meet needs such as entertainment, diversion, and information gathering (Hambrick et al., 2010). Furthermore, the SNSs considered for this study include Facebook, Twitter, Instagram, WhatsApp, YouTube, Snapchat, and Pinterest, are discussed below.

### 2.4.1 Facebook

Since Facebook has been deemed one of the most popular social networking platforms (Wallace et al., 2011) a groundswell of studies investigated the definition and history of social media (Boyd & Ellison, 2007), the rise and growth of Facebook (Caers et al., 2013), and the motivations of sports fans to communicate on Facebook (Stavros, Meng, Westberg, & Farrelly, 2014) by analysing how interactivity on Facebook relates to users’ browsing behaviour and spending time on a sports news website (Boehmer & Lacy, 2014), as well as the strategies considered for attracting Facebook “fans” (Pronschinske et al., 2012).

Facebook operates as a virtual community where users create a public or semi-public profile to communicate and network with friends or others with similar interests (Stavros et al., 2014).
It was initially launched in 2004 as a site designed to connect students on college campuses until Facebook allowed commercial organizations to create pages and by 2006, nearly 22 000 organizations had created Facebook profiles (Pronschsinske et al., 2012). Despite opening to the public in 2006, Facebook was reportedly serving one billion active users at the end of 2012, of which 80% of users reside internationally, and availed its services in 70 languages (Caers et al., 2013). Continued growth in the use of Facebook saw an increase in the number of sports organizations that embedded Facebook content into their marketing strategies, particularly through professional sports teams and athletes (Pritchard, Stinson, & Patton, 2010).

In this regard Facebook has become an enticing medium for sports marketers because costs are minimal, product and service information can be conveniently distributed, and information that can be used over extended periods is easily posted and stored (Pronschsinske et al., 2012). Existing literature details what Facebook is and explains the steps to creating a Facebook account, states the initial motives for joining Facebook, highlights the characteristics of its users, as well as building and maintaining a Facebook network (Caers et al., 2013). The latter extends into the realm of sport, by introducing Facebook as a major social media site that is commonly used by a network of sports athletes, teams, fans and other prominent sports organizations (Wallace et al., 2011).

2.4.2 Twitter

The microblogging and SNS, Twitter, is of significance to sport because it has brought fans, athletes, and sports journalists into the same communication network (Hutchins, 2011; Sheffer & Schultz, 2010). This site allows individuals to create a Twitter account that is linked to a username preceded by the @ symbol, and once the account is created, Twitter users connect to
one another by electing to “follow” another Twitter user (Sanderson & Hambrick, 2012). In the digital-media-sport landscape, the microblogging site, Twitter, has been particularly influential (Lebel & Danylchuk, 2012) and it has become an integral part of sport since its introduction in 2006 (Gibbs & Haynes, 2013). This communication phenomenon has been embraced by the sporting world at an extraordinary pace (Lebel & Danylchuk, 2012).

Twitter is the “place” for instant, breaking sports news (Sanderson & Hambrick, 2012). Twitter combines several unique aspects of communication, which make it attractive to both sports fans and sports organizations (Clavio & Kian, 2010). Although there are multiple social-media platforms operating in the sports market, Twitter is at the forefront with sports stakeholders (Sanderson & Kassing, 2011). Based on its characteristics, Twitter is often referred to as a microblogging service (Java, Song, Finin, & Tseng, 2007) that can best be described as a derivative of blogging, which involves the transfer of news, personal opinion, and ideas in an online setting (Clavio & Kian, 2010). Blogging typically involves a dedicated Web site with a main-page focus on expansive content produced by an individual or small group, whereas Twitter uses a much less media-rich interface, where the primary focus is on short bursts of content from a large number of users (Clavio & Kian, 2010).

2.4.3 Instagram

Over the years SNSs have become the major communication tool by which people develop their personal online network and where Instagram has proven that pictures speak louder than words by exceeding Twitter and other social media platforms in terms of users (Lee, Lee, Moon, & Sung, 2015). Instagram, referred to as a fun and quirky way to share your life with friends through a series of pictures (Geurin-Eagleman & Burch, 2016), is a mobile photo and
video capturing and sharing service that provides users an instantaneous way to capture and share their life moments with friends through a series of filter manipulated pictures and videos (Hu, Manikonda, & Kambhampati, 2014).

After creating an online Instagram account users are able to interact with the social networking site by taking photos, filtering photos and sharing these photos online (Buck, 2012). Additional functionality was added in 2013, including the ability to share and later import videos, and share photos with specified individuals through direct messaging (Baig, 2013; Miners, 2013). The Instagram communication tool include three advantages that: first, it is the only major social networking application that was launched on mobile phones rather than on the Internet; second, it is not conversation-intensive such as Facebook and Twitter; and finally, the content posted on Instagram is thought to have a longer shelf life than that of other social networking sites (Miles, 2014). With this sentiment of longevity, Instagram markets itself as a medium that allows users to transform an image into a memory to keep around for forever, by documenting their stories through photographs and short videos (Lee et al., 2015).

Instagram was created by Kevin Systrom and Michael Krieger, launched in October 2010, and in two days the application gained nearly 40 000 users (McCune, 2011). A brief history reveals that Instagram rapidly gained popularity by reaching over 100 million active users as of April 2012 (Bakhshi, Shamma, & Gilbert, 2014), rapidly becoming the fastest-growing social media outlet with over 300 million users worldwide (Systrom, 2014) and named the best platform for brands by SumAll, a business analytics tool that tracks over 100 000 brands on social media (Koetsier, 2013). Considering this swift extension, Instagram is becoming increasingly popular with some industry analysts positing that Instagram is the fastest growing social media platform (Smith & Sanderson, 2015).
Since this popularity expanded into the world of sport (Hutchins, 2011) Instagram has become the go-to place among sports fans, hosting 131 million users during the 2016 Olympics with 916 million interactions about the events (Kim & Hull, 2017). Therefore, it is not surprising that Instagram has become heavily integrated into many aspects of sport amongst multiple stakeholders (Smith & Sanderson, 2015). Previous research explored athletes’ self-presentation on Instagram across a variety of sports in an attempt to uncover themes from the captions used by the athletes in their Instagram photos, concluding on the following six prominent themes alluded to in section 2.4 above, emerging from captions: humanitarian, family driven, personality traits and interests, dedicated athlete, endorser, and socialite (Smith & Sanderson, 2015). Concluding that sports organizations employ the assistance of athletes to endorse their brands on Instagram.

2.4.4 WhatsApp

WhatsApp, the most popular messaging application all over the world, is owned by Facebook and currently has over one billion monthly active users in over 100 countries (Vengatesan & Sudarshan, 2017). Since its introduction in 2009, the mobile instant messaging application has reached 200 million users worldwide, sharing 700 million photos and 100 million videos daily (Ahad & Lim, 2014). Known as a communication tool, WhatsApp messenger allows users to send instant messages, photos, video, and voice messages and to make voice calls over an internet connection (Giordano et al., 2017). The application requires a mobile internet connection to function and both parties must have the proprietary software installed on their mobile and smartphones (Church & de Oliveira, 2013). Its main feature is to help people stay connected by sending and receiving messages at no per-message cost to the user (Giordano et al., 2017). WhatsApp also provides additional social information to its users, e.g., contacts can see when their friends are online, when they are typing and when they last accessed the
application, as well as providing delivery notifications, highlighting when a message is sent and when its delivered to the recipients’ device (Church & de Oliveira, 2013). The sports industry has witnessed remarkable changes since the emergence of social media, including changes in WhatsApp, that have brought new opportunities to sports communication by making the public more ardent and enthusiastic in their support for sports, clubs, and players (Agbo, 2015).

2.4.5 YouTube

The website, YouTube.com, is currently the third most accessed website globally after Facebook and Google (Williams et al., 2014). On 15 February 2005 the domain name “YouTube.com” (YouTube) was activated by three entrepreneurs, Chad Hurley, Steve Chen, and Jawed Karim and quickly flourished into one of the most popular websites in the world (Mellow, 2007). The launch of YouTube was accompanied by a goal to create a space that allowed people to share and comment on videos, and one month later, in the form of a virtual reality, YouTube debuted a personal video that later expanded YouTube as a hot spot destination for entertainment, information, and opinion (Mellow, 2007).

YouTube has grown to be extremely popular worldwide, earning accolades for its ease of use (Breen, 2007). After the user uploads and “tags” a video, YouTube encodes it, supplies a player, and provides bandwidth and server space at no charge to the user (Breen, 2007). Once the video is posted, a uniform resource locator (URL) is provided which can be passed on to other users or used to embed the video on another website (Breen, 2007). The evolution of options in the features of YouTube displays how many times an individual clip has been viewed, an opportunity for users to indicate their thoughts regarding the individual clip, “like” or “dislike” a video, post comments, subscribe to YouTube channels, share videos or deem it inappropriate
(Zimmerman et al., 2011). Additional features allow users to rate the video, flag it as a "favourite," or share it with fellow YouTube members, rendering the site more than a mere viewing service (Mellow, 2007). This suggests that a variety of content can be found on YouTube such as user-created content relating to family videos, amateur lip-synched songs, as well as music, movies, and sport (Breen, 2007).

YouTube is one of several forms of social media currently being utilized by sports organizations to market their team, specifically used to share videos with fans about the team or organization (Witkemper et al., 2012). In recent years, numerous sports organizations have embraced YouTube as part of their integrated marketing communication strategies by creating partnerships with YouTube and launching YouTube Network channels to increase sponsorship opportunities (Mahoney, Hambrick, Svensson, & Zimmerman, 2013). Since YouTube represents a unique communication opportunity for sports organizations that do not necessarily enjoy a significant amount of mainstream coverage (Zimmerman et al., 2011), sports organizations can benefit from exposing potential and current viewers to their sports, leading to positive sentiments and purchasing behaviours (Miloch & Lambrecht, 2006; Bennett, Henson, & Zhang, 2002).

2.4.6 Snapchat

The social media application Snapchat, has ascended rapidly, quickly becoming the third most utilized platform of millennials with a valuation as high as US$19 billion (Billings et al., 2017). Snapchat represents a major shift from virtually all other applications because of one crucial aspect: Images and videos shared are only temporary, ranging from 1s to a maximum of 24 hours (Billings et al., 2017). Snapchat, otherwise known as snaps, also affords its users the ability to compile a number of snaps into a story, which allows for multiple photos and videos
to be added in chronological order as to show the progression of events (Spinda & Puckette, 2018). Snapchat is appealing to sports fans precisely for its temporary nature as the ephemerality can be alluring (Constine, 2014). This application may create a sense of urgency to interact on this platform, leading fans to potentially prioritize this platform over ones with archived histories (Beese, 2013). Posts on competitors’ sites will always be there, causing many fans to prioritize interacting on Snapchat (Billings et al., 2017). Regardless of one’s stance on the advantages of the disappearing photos and videos, there is no denying the ubiquitous growth of Snapchat (Billings et al., 2017).

In three years Snapchat has grown to be the third most used social networking platform among millennials (Perez, 2014) and is already viewed as a threat to Facebook and Twitter (Levy, 2014). A national survey of 125 respondents revealed that people using Snapchat to follow sports devote roughly the same amount of time to the platform as Facebook and more time than Twitter, Instagram, or Pinterest (Billings et al., 2017). Sports teams have taken advantage of this growth by offering an array of discounts to keep fans engaged and capture game day event interests (Horowitz, 2014). In 2013, 60 million photos disappeared daily (Watson, 2013); in 2014, people posted 700 million photos and videos per day (Shontell, 2014). Continued research revealed that teenagers are most likely to use Snapchat (McCauley, 2014) as well as sports teams such as the New Orleans Saints and San Francisco Giants, that send messages and add messages to their story (Silverman, 2014). Snapchat is also recognized for promoting sports games and revealing behind-the-scenes photos and videos of athletes and teams (Han, 2014), proving that Snapchat can be a useful and integral social media application for following sports (Constine, 2014).
By Snapchat providing a temporarily heightened interaction for fans (Billings et al., 2017), distinctive features not offered through other platforms (Burns, 2014) is viewed as distinguishing attributes that makes the concept of Snapchat genius (Constine, 2014). Leaving sports teams and athletes to embrace the opportunities that Snapchat provides (Billings et al., 2017).

2.4.7 Pinterest

Pinterest remains an under-researched area as it represents one of the newer social media platforms establishing itself as a viable contender within this realm (Hambrick & Kang, 2015) by revolving around the metaphor of a “pin board” (Gilbert, Bakhshi, Chang, & Terveen, 2013). Operating like a virtual scrapbook, Pinterest allows users to create theme-based “boards” where they can “pin” pictures, stories, and videos found online, capturing this content by clicking the “Pin It” button on their web browser’s toolbar and posting the images on their Pinterest boards (Hambrick & Kang, 2015). A distinguishing feature of Pinterest focuses on users’ sharing their personal interests such as cooking and do-it-yourself projects rather than following other users for their personal status updates (Bosker, 2012). This unique attribute provides sports leagues including the Chicago Blackhawks and Detroit Pistons with an opportunity to showcase their organizations (Hambrick & Kang, 2015). Pinterest allowed these sports leagues to highlight behind-the-scenes access to players and other personnel, merchandise such as pictures of jerseys, hats and other apparel for fans, catering pages to younger fans, photographs of old logos and vintage sports moments (Hambrick & Kang, 2015).

2.5 SOCIAL NETWORKING SITES IN INTERCOLLEGIATE ATHLETICS

A need exists for intercollegiate athletic programmes to increase spending on marketing strategies in order to enhance revenue streams (Burden & Li, 2003). Social media has become
ubiquitous in today's society and collegiate athletic departments adopted these platforms to connect with fans (Haught et al., 2016). Social Networking Sites (SNSs) allow collegiate athletic departments to keep fans up-to-date with the latest news and information, but also allow for fans to enjoy access to insider information that might not be reported by traditional media outlets (Kassing & Sanderson, 2010).

Within college sports, social media hold great promise (Clavio & Walsh, 2014) and has provided college athletics with an opportunity to increase its level of interaction, not just with internal stakeholders but also with fans (Clavio, 2011). As a result, the fans of college athletics are using social media at a record pace, including some athletic departments using social media such as Facebook and Twitter for marketing purposes like ticket giveaways, fan interaction and general feedback (Clavio & Walsh, 2014). Since Twitter is the predominant social media platform used by athletes, teams, and leagues for directly engaging with their wider publics (Hambrick et al., 2010), coaches showed an interest and started using Twitter to connect with fans, impress recruits, and promote their programmes (Clavio, 2011).

Although social media has provided new ways for individuals, athletes, coaches, and schools to communicate and share information, it could be argued that college sports as a whole have been remarkably slow in embracing and accepting social media as a tool for marketing, networking, and public relations (Clavio, 2011). Despite this slow acceptance, college athletic departments noted the importance of embracing social media as its use has rapidly become an unavoidable part of the current college experience (Browning & Sanderson, 2012). College athletic departments have considered that the use of social media is geared to communicate more interpersonally and enhance the overall sports experience (Frederick et al., 2012). As social media continue to grow, the need for sport entities in understanding audiences present
on social media and their behaviour, becomes increasingly more important (Clavio & Walsh, 2014).

2.6 SPECTATOR BEHAVIOUR

Sport spectating has become a prevalent leisure activity in society (Trail, Anderson, & Fink, 2000) where spectators have grown from being referred to as more than passive viewers of a sports match (Sloan, 1989). Although a distinction between sport spectators and fans was previously offered (Sloan, 1989) this offering was challenged and suggested to be inconsistent in the use of the terms “spectators” and “fans”, contributing negligence of researchers to report this distinction in previous results (Trail, Robinson, Dick, & Gillentine, 2003). Further research conceded that a distinction between sports spectators and fans play a critical role in marketing for the consumption behaviour of sports spectators and sports fans (Trail, et al., 2003). Sports spectators are known to be persistent, engaged and active followers of the sport and who will invest resources in such sport over a prolonged period of time (Stander & Zyl, 2016). For the purpose of this study, the term “sports spectator” will be used. Considering the description of sports spectators, it is important to understand the behaviour that governs spectators.

Spectator behaviour is vast and analyzed from purchasing tickets or merchandise to tweeting about team performance or subscribing to a sport-specific cable package (Dwyer, LeCrom, & Greenhalgh, 2016). This preceding statement indicates that behaviour has previously been measured as an outcome variable, measuring repeated television viewership, event attendance and internet usage (Dwyer et al., 2016). Spectators play an important role in a player’s performance in sports events since players are motivated by the enthusiasm of the watchers (Huang, 2011). It has been noted that the development of sport could benefit from spectators’
support (Cheng, 2007) explaining a growing interest in understanding the precursor to the behaviour of attitudinal loyalty (Heere & Dickson, 2008) and motivation (Wann, 1995).

Another interest contributing to spectator behaviour is the behavioural differences between male and female spectators (Bahk, 2000). Research in gender-based behaviour between male and female sports spectators concluded differences in the involvement of male sports spectators and that of their female counterparts (Bahk, 2000). Male sports spectators were more likely to experience emotional fluctuations from watching sports and they appear to invest more time in reading, listening, watching, and talking about sports (Ridinger & Funk, 2006). These findings were supported by results that indicate male sports spectators were more likely to engage in the traditional sports fan behaviour, as well as cementing a firm identity to that of a sports fan (Dietz-Uhler, Harrick, End, & Jacquemontte, 2000). Spectator-Gender and Team-Gender have been related to the examination of environmental factors that contribute to sport consumption behaviour and attendance (Fink, Trail, & Anderson, 2002). Considering the description of sports spectators and the behavioural differences between male and female sports spectators, it is important to understand the different reasons that attract sports spectators to particular sports (Stander & Zyl, 2016).

The first attempt at understanding the motivation of spectators was in the early 2000s (Trail & James, 2001) that later developed into the motivation for sport consumption theory, and then grouping the motives of sport spectators into two categories, psycho-sociological, personal or individual and behavioural game related factors (Choi, Martin, Park, & Yoh, 2009). These categories serve as the main influence in spectators’ consumption of sport and they are directly related to spectators’ buying behaviour (Cottingham, Phillips, Hall, Gearity, & Carroll, 2014; Izzo, et al., 2014). Sports spectators experience their consumption of sport as intrinsically
rewarding and meaningful which leads to the experience of positive emotional experiences (Potter & Keene, 2012). Existing literature suggests that spectators of specific sports have different underlying psychological motives for their consumption of sport (Karakaya, Yannopoulos, & Kefalaki, 2015; Cottingham et al., 2014; Trail & James, 2001). Among the first developments of measuring behaviour, the following eight factors were identified: eustress, self-esteem, escape, entertainment, economic such as gambling, aesthetic, group affiliation, and family (Wann, 1995). Previous researchers found gender differences in motives relating to achievement, aesthetics, knowledge, empathy, and family (Ridinguer & James, 2002) as well as differences on social aspects of being sports fans (Dietz-Uhler, Harrick, End, & Jacquemontte, 2000).

Additional factors were extended by the Sport Interest Inventory (SII) to examine sports spectators: players as role models, entertainment value such as affordability, bonding with family, and wholesome environment (Funk, Mahony, Nakazawa, and Hirakawa, 2001). Continued research yielded the development of the Motivation Scale for Sport Consumption (MSSC), the Sport Interest Inventory (SII), and Points of Attachment Index (PAI), that measures motivational factors and relationships between these motives (Trail, Robinson, Dick, & Gillentine, 2003; Funk, Mahony, Nakazawa, & Hirakawa, 2001; Trail & James, 2001). With numerous sporting contests held around the world, spectators drive the demand for sporting events (Lu, Lin, & Cheng, 2011) leading to the understanding that spectating behaviour is of interest to sports marketers seeking to increase team revenues and gate receipts (Wann, Grieve, Zalalac, & Pease, 2008). Spectator behaviour considered in this study include attendance, loyalty, trust and commitment, that are discussed below.
2.6.1 Attendance

Dating back to the 1980s, sports management and psychology research focused on spectator attendance (Hansen & Gauthier, 1989), one of the primary revenue sources for team sports. Previous research found that social influence, team identification, and perceived value significantly affected spectators’ intention to attend sports games, such as the perception of spectators that others approve their attendance at sporting events, would positively affect other future events (Wakefield, 1995). Both personal motivation and event attributes have been noted as important considerations of sport attendance (Trail, Fink, & Anderson, 2003) that includes three elements conditioning an individual’s position toward sport events: individual motivations and expectations, external influences such as people who may influence the potential fan, and eventual behaviour (Trail, Fink, et al., 2003). Echoing this position is the Scale of Attendance Decision (SAD), that measures the psychological factors of game attributes, game convenience, home team, economic weighting and visitor team, that influence attendance of sporting events (Zhang, Pease, Hui, and Michaud, 1995).

Existing literature thoroughly investigated motives for attending sporting events or for being a sports fan (Funk, Mahony, Nakazawa & Hirakawa, 2001; Trail & James, 2001; Kahle, Kambara & Rose, 1996) concluding that the influence of stadium conditions including weather, time convenience and latest competitive results (Fink et al., 2002) affect sports attendance. Additional factors that motivate fans to attend sports games comprise of self-esteem enhancement, diversion from everyday life, entertainment value, eustress, economic factors, aesthetic value, need for affiliation, and family ties (Hirvonen, 2014). These factors prove that people consume sport for different reasons, individuals possess various motives for attending games and concluding the need for club-marketers to acquire first-hand knowledge on fan
motivational factors as a stepping stone to improve spectator attendance at sporting events (Trail, et al., 2003).

The understanding of fan motivational factors presents an opportunity for the recommendation of six strategies to increase sporting event attendance that include: (1) increase the value of the event; (2) increase student involvement with the sports programme; (3) increase the event publicity and exposure through media strategies; (4) broaden the target market to include the community; (5) increase the “fun” factor of the event by including things such as a team mascot, cheering and dance squads, bands, and crowd participation games; and (6) increase promotional activities to including contests, prizes, and giveaways (Mumford, Kane, and Maina, 2004). Other suggestions noted that focusing on providing an entertaining experience at sporting events and adding value to the experience such as lowering the admission or food price, leads to an increase in event attendance (Wakefield & Sloan, 1995; Wann, 1995). While winning may not be a significant predictor of sports event attendance among highly committed fans, the ability of a team to entertain is critical (Gladden and Funk, 2001). Another source of entertainment that influences attendance of sporting events is sales promotion (Branvold and Bowers, 1992). Research has indicated that promotions at university sport, including tournament contests, three-point shoot-outs, and “best-dressed fan” contests, positively relate to attendance (Bird, 1982; Hansen & Gauthier, 1989). Supporting researchers agree that sales promotion influences game attendance, while others recommend providing an entertaining experience (Gladden and Funk, 2001).

2.6.2 Loyalty

Sports fans who have formed strong connections to their favourite team may be termed loyal fans (Yoon, Petrick, & Backman, 2017). Fan loyalty is viewed as a commitment to a single
team that is persistent, resistant to change, and influences cognitive thoughts and behaviour (Wu, Tsai, & Hung, 2012). Loyal sports fans resist the temptation to switch to a ‘more successful’ team during a losing season or adopt a new ‘favourite’ player when their current favourite is down on form (Neale & Funk, 2005). An important step in dissecting the concept of loyalty is to recognise that loyalty is a two-dimensional construct consisting of attitude and behaviour (Bauer, Stokburger-Sauer, & Exler, 2008).

Attitudinal loyalty considers the inner connections of fans to their team, distinguishing between true loyalty and spurious loyalty, defined as a sports spectator who does not possess a strong positive attitude but who nevertheless watches games on an ongoing basis (Backman & Crompton, 1991). Mental commitment towards a brand or product and the expected desire of the consumer to purchase, steers the understanding of attitudinal loyalty, as well as showcase a reflection of an individual’s psychological commitment to sports teams, thus explaining the value of sports teams (Bauer et al., 2008; Funk & James, 2006). As a contributing factor, attitudinal loyalty serves as a predictor of behavioural loyalty (Pritchard, Havitz, & Howard, 1999).

Behavioural loyalty represents past behaviour, as well as behavioural intentions including consistency, repeat purchase, a frequency of encounters and repetitive behaviours, that is viewed as the strength of the relationship between attitude and actual purchasing behaviour (Dick & Basu, 1994). Behavioural loyalty is attributed to specific consumer purchases that encompass merchandise purchases and the frequency in which an individual attends a team’s game (Funk & James, 2006). Although previous research identified several components of behavioural loyalty (Laverie & Arnett, 2000; Wakefield, 1995) further research contributes the following activities to loyal behaviour: attending the favourite team’s game live in the
stadium/facility, watching the favourite team’s games on television, consuming other team-related media, purchasing team merchandise/apparel, wearing the colours or logo of the favourite team, and trying to convince others that the favourite team should be supported (Bauer et al., 2008; Gladden & Funk, 2001; Funk & Pastore, 2000; Mahony, Madrigal, & Howard, 2000). Understanding the variables that influence loyalty may assist sports organizations in their management of spectator attendance and retention.

2.6.3 Trust

The rapid growth of virtual communities on the internet and accompanying surge in interest by researchers raises the question of what encourages members to interact and make virtual communities more vibrant (Ridings & Gefen, 2002). Members of these communities are typically strangers to one another and may require the development of trust to engage in their social network (Ridings & Gefen, 2002). Trust is a multidisciplinary concept that was first discussed in the primary disciplines concerned with trust relationships, including psychology, sociology, and computer science (Sherchan, Nepal, & Paris, 2013). It is known as an implicit set of beliefs that the other party will refrain from opportunistic behaviour, will not take advantage of the situation (Gefen, 2002; Hosmer, 1995; Moorman, Zaltman, & Deshpande, 1992) and it is widely accepted as a major component of human social relationships (Sherchan et al., 2013). In general, trust is a measure of confidence that an entity will behave in an expected manner, despite the lack of ability to monitor or control the environment in which it operates (Singh & Bawa, 2007). Trust is important in virtual communities such as social networking sites where the absence of workable rules makes a reliance on the socially acceptable behaviour of others, i.e. trust, essential for the continuity of the community (Ridings & Gefen, 2002).
In the context of social networks, trust serves as an important mechanism to reduce the uncertainty and complexity of exchanges and relationships (Grabner-Kräuter & Bitter, 2015) that is based on three criteria: (i) trust information collection, (ii) trust value assessment, and (iii) trust value dissemination (Sherchan et al., 2013). Each criterion in turn can be further classified: trust information collection into three sources, namely (i) attitudes, (ii) behaviours, and (iii) experiences; trust value assessment according to the data model, namely (i) graph, (ii) interaction, and (iii) hybrid; and trust value dissemination into trust-based recommendation and visualization models (Sherchan et al., 2013).

In addition to individuals using such networks to connect to their friends and families, governments and enterprises have started exploiting these platforms for delivering their services to citizens and customers (Sherchan et al., 2013). The success of such attempts relies on the level of trust that members have with each other as well as with the service provider (Sherchan et al., 2013). For this reason, trust becomes an essential element of a successful social network and an important aspect of social networks and online communities (Sherchan et al., 2013). In general, trust is a measure of confidence that an entity or entities will behave in an expected manner (Sherchan et al., 2013).

2.6.4 Commitment

Without enduring fans, the business of professional sports would be unable to maintain its status as a multi-billion-dollar industry (Wilkins, 2012). A growing body of literature about consumer behaviour is focused on the motives for attending sporting events (Neale & Funk, 2005) or participating in specific sports activities (Funk, Mahony, & Havitz, 2003). The commitment with a sports organization is often suggested as being the factor that induces consumption behaviours (Weiss & Weiss, 2006). Sports commitment is defined as a
psychological state representing the desire to continue to participate in a particular sports program or sport in general (Fernandes, Correia, Abreu, & Biscaia, 2013). Since commitment was related with purchase intentions and participation frequency (Casper, 2007; Casper, Gray, & Stellino, 2007), increasing the participants’ commitment is an important issue for sports managers (Casper et al., 2007).

The role of sports commitment has never been used to understand media consumption (Fernandes et al., 2013). Instead, a variety of terms have been used to describe the relationship between the spectators, the fans, and a team or a sporting event (Taghizadeh, Ghorbani, & Behnam, 2015). These terms are as follows: identification, attraction, communication, attachment, involvement, validity and importance, commitment, and loyalty (Funk & Pastore, 2000; Mahony, Madrigal, & Howard, 2000; Kerstetter & Kovich, 1997; Wann & Branscombe, 1993; Murrell & Dietz, 1992; Hansen & Gauthier, 1989). Psychological commitment is an all-encompassing construct that influences attitudinal loyalty, and eventually, attitudinal loyalty has a direct effect on behavioural loyalty (Tachis & Tzetzis, 2015).

A conceptual overlap between the constructs of commitment and loyalty has been noted (Tachis & Tzetzis, 2015), clarifying that commitment is an internal psychological state of mind an individual has toward a brand (Heere & Dickson, 2008). In the context of this study, psychological commitment reflects the attitude of student spectators toward university sports teams, as well as their future intentions of commitment (Iwasaki & Havitz, 2004). It was deemed necessary in previous literature to examine the relationship between sport consumer behaviours such as participation frequency, sporting goods and media consumption, concluding that sports commitment positively influences the participation frequency, sporting goods and media consumption of sports consumer behaviour (Fernandes et al., 2013). Relating
to understanding that motivations behind an individual’s continuous support of a professional sports team allows one to determine the best methods to employ in order to create fans out of individuals who remain uncommitted to a specific team or sport (Bee & Havitz, 2010).

2.7 UNIVERSITY SPORT

Universities in South Africa have increasingly played a part in the changing political architecture and global landscape of the country (Burnett, 2010a). Subsequently, higher education institutions provide students with a relatively well-resourced and specialized environment for recreation and high performance sport participation (Burnett, 2010b). Stakeholders including the National Lotteries Distribution Fund (NLDF) and South African Sports Confederation and Olympic Committee (SASCOC) provided most universities with resources to fulfil a mandate on delivering sport for community engagement at grass roots level, as well as for elite athlete and sport development (Burnett, 2010a). Thus, the involvement in sport by South African universities is guided and mandated by the constitution of University Sport South Africa (USSA).

University Sport South Africa (USSA) was born of the founding organizations and institutions formerly represented by the South African Student Sports Union (SASSU), i.e. South African Universities Sports Council, the South African Colleges Sports Association, the South African Technikons Sports Council, and the South African Tertiary Institutions Sports Union, and is registered as a Non-Profit Organisation (NPO) established and incorporated under the Non-Profit Organizations Act 71 of 1997 (University Sport South Africa, 2017). A detailed history of the unified student sport movement in South Africa includes the establishment and constitution South African Student Sports Union (SASSU) in 1994 and the reconstitution of USSA in 2008, introducing an exciting new era in student sport at tertiary education institutions.
that unified historically separate groupings to establish a new tradition that reflected the aspirations of all student sports persons (University Sport South Africa, 2017). As a result of an agreement reached by SASCOC that university sport should exist independently, SASSU was changed to USSA and sought to proceed as the official national co-ordinating umbrella sports structure for the regulation and organisation of all university sports activities in South Africa (University Sport South Africa, 2017).

The composition and membership of USSA includes higher education institutions in South Africa in which USSA aims to develop and enhance an environment that these Member Institutions of Higher Education and their bona fide students participate in sport, through the pursuit of ensuring that all student sport associations share the same vision and aspirations as USSA. Furthermore, the composition and membership facilitate and promote the formation of sport associations when a need arises, as well as facilitating and influencing the development of sport by promoting mass bona fide student participation through intramural, inter-campus and other forms and to promote high performance for elite performers (University Sport South Africa, 2017).

Complimenting USSA is Varsity Sports, a high performance competition that enables South African universities to compete against one another in a number of different sporting and cultural codes including athletics, hockey, cricket, football, rugby sevens, netball, basketball, and choral singing (Varsity Sports, 2014). Varsity Sports was founded and established in 2009 and administered by Cape Town and Sandton-based Advent Sport Entertainment & Media (Pty) Ltd (ASEM), and serves as the exclusive service provider, via a 10-year multimedia rights agreement, to the University Sports Company (USC) (Varsity Sports, 2014). The main objective of USC is to administer, develop, coordinate and promote non-professional sport
between higher education institutions in South Africa (Varsity Sports, 2014). The organisation also plays a vital role in connecting operational students, active students and alumni, as sport remains one of its most powerful marketing platforms, concluding that sport has been a catalyst for change and nation building in the young democracy of South Africa (Varsity Sports, 2014).

2.8 THEORETICAL FRAMEWORK: DECISION-MAKING PROCESS FOR SPORT INVOLVEMENT MODEL

This study adopted the Decision-Making Process for Sport Involvement model as a lens for the data collection and analysis. The Decision-Making Process for Sport Involvement model (Figure 2.1) is an adaptation of the Consumer Decision-Making Process model that was developed with the intention to identify and understand the process of consumer’s decisions before they purchased products or services. This model later evolved in the sport industry as the Decision-Making Process for Sport Involvement model to assist sport marketers in establishing a standard process by which consumers make decisions about “becoming or staying involved with sport products” (Mullin, Hardy & Sutton, 2007, pg. 77). The purpose of applying this model was to ascertain how social networking sites influence student spectators’ decision-making to attend university sports games.

In order to understand sport involvement, the Decision-Making Process for Sport Involvement model comprise the following dimensions: Need recognition; Awareness or Information search; Evaluation of choices; Purchase decision; Sport experience; Evaluation of experience; Dissatisfaction, dropout; Satisfaction, repetition; Marginal Dissatisfaction, Consideration of other products or activities. The last three dimensions - Dissatisfaction, dropout; Satisfaction,
repetition; Marginal Dissatisfaction, Consideration of other products or activities – was collectively considered in this study as Post-Evaluation behaviour.

Each dimension of the Decision-Making Process for Sport Involvement model is discussed below after the diagram representation of the model. The application of each dimension of the Decision-Making Process for Sport Involvement model to this study is presented after the individual discussion of each dimension. The discussion below is referenced from Mullin, Hardy and Sutton (2007), pg. 77-78.

Figure 2.1 Decision-Making Process for Sport Involvement model
2.8.1 Need recognition

The first dimension of the Decision-Making Process for Sport Involvement model is need recognition. This dimension encompasses any number of cues, particularly images in the mass media, may trigger the arousal of a need or motive. These motives may be related to achievement, esteem, affiliation, health, or other sport motives. This dimension considers any individual or environmental factors that may trigger an arousal of need, including team identification as one of the most important factors in determining attendance. In that respect, team identification might be seen as the starting and ending place for each cycle of fan decision making.

2.8.2 Awareness or Information search

Awareness or Information search is the second dimension in the Decision-Making Process for Sport Involvement model. It considers whether consumers may have prior awareness of, or may seek information about products that can satisfy aroused needs. Marketers must never underestimate this critical stage since previous studies of sport involvement point to the importance of information about distance to venue, time to travel, and cleanliness of venue. Considering the consumer’s perceptual filter, the marketer cannot make any assumptions about the accuracy of the consumer’s perceptions due to the possibility that consumers may be unaware of the product. In these respects, social media have become game changers as more consumer’s base decisions on their social media world.

2.8.3 Evaluation of choices

In the third dimension of the Decision-Making Process for Sport Involvement model, evaluation of choices, consumers make product choices at a number of levels including product family, product class, product line, product type, and product brand. Product family considers
the realm of leisure and choices people make between broad families such as competitive sports, outdoor recreation, and hobbies. In product class there are many classes of sport such as motorsports, water sports, field sports, and team sports. Within product line the team sport class are lines of products such as bat and ball sports, ball-only sports, and stick and ball sports. Product type states that the ball-only line are product types such as rugby, world football, and American football. Product brand includes the product type of American football are various brands including the National Football League (NFL) and the National Collegiate Athletic Association (NCAA). Consumers are surrounded by levels of choice as they engage the world around them, therefore they may be steered toward decisions at any of the preceding levels, which may influence their attitudes at other levels.

2.8.4 Purchase decision

The fourth dimension of the Decision-Making Process for Sport Involvement model is purchase decision. This dimension suggests that numerous questions demand research concerning the sport consumer’s purchase decisions; for example, to what extent are decisions to purchase a sport experience with time, money, and effort, planned and calculated or unplanned and impulsive? As one review of research marketers, “Studies of sport fans indicate that a majority – especially in baseball, basketball, and hockey – make purchase decisions only a few days before the event”. Walk-up fans and season-ticket holders require different messages.

2.8.5 Sport experience

Sport experience is the fifth dimension in the Decision-Making Process for Sport Involvement model. This dimension may include a period of anticipation after a person has made the decision of thinking about the big game a month before it is to occur, a period of perception that includes readying the tailgating food, drink, and grill the night before. This dimension also
includes the experience of travelling to the site of the sport experience, the main experience of the sporting event, and travelling from the site of the sport experience.

2.8.6 Evaluation of experience

In the sixth dimension of the Decision-Making Process for Sport Involvement model, evaluation of experience, an effective illustration of evaluation is the consumer’s satisfaction equation:

\[
\text{Satisfaction} = \text{Benefits} - \text{Cost}
\]

Satisfaction relates to social experience, self-concept, skill, reliability, or any other elements. Benefits relate to characteristics like quantity and duration. Cost include money, time, ego, effort, and opportunities to do other things. To ensure a positive experience, in the end, benefits must outweigh cost. Marketers attempt to maximise satisfaction through the various elements of the marketing mix but consumers continue to filter the stimuli around them, leading to their positive or negative attitudes for a host of reasons. One of the most important is the consumer’s assessment of competence, as a player or a fan. Has the experience enhanced the person’s sense of competence and self-worth? Has it strengthened his or her identity? The answer has a major influence on subsequent behaviour.

2.8.7 Post-evaluation behaviour

The final dimension in the Decision-Making Process for Sport Involvement model is post-evaluation behaviour. This dimension consists of the following elements: Dissatisfaction, dropout; Satisfaction, repetition; Marginal Dissatisfaction, Consideration of other products or activities. After evaluating the consumer has three basic choices:

1. If satisfied, to report the experience, and perhaps build a stronger affinity with the activity. Satisfied fans typically indicate that they plan to attend more of a team’s events in future – that is, they intend to move up the escalator.
2. If dissatisfied, to reduce or abandon the activity. Some participants and spectators move down or even off the escalator.

3. If marginally satisfied or dissatisfied, to re-evaluate information and decisions about product choices at various levels (family, class, line, type, and brand).

In conclusion, the use of this model could assist sports administrators to uncover the standard rational consumer decision-making process. This would subsequently provide information about the relationship between the use of social networking sites and student spectator behaviour in university sport.

2.9 CHAPTER CONCLUSION

In summary, this chapter sought to provide an understanding of the main variables of the study, social networking sites and student spectator behaviour, within four main areas: attendance, loyalty, trust, and commitment. The theoretical framework applied to this study was discussed, concluding that the Decision-Making Process for Sport Involvement model will be used in chapter five to highlight the relationship between social networking sites and student spectator behaviour in university sport.

Chapter Three which follows provides the methodological approach of this study. The research setting, research design, and sample are described in detail. The researcher states the data collection procedure and the steps used for data analysis. A description of validity and reliability is presented as well as the ethical considerations of this study. Following this is a chapter conclusion.
CHAPTER THREE

METHODODOLOGY

3.1 INTRODUCTION

This chapter commences with the methodological approach adopted in this study. Chapter Three outlines the research method and research design of this study, including descriptions of the research setting, population, sample, and data collection procedure. The chapter continues by highlighting the steps used for the analysis of data to derive findings, which are presented in Chapter Four. The researcher adopted a quantitative approach, using a cross-sectional design, and an online survey to examine the relationship between the use of SNSs and student spectator behaviour in university sport that is presented in this study. Details pertaining to the data collection procedure and the steps followed to analyze data is presented, as mentioned in Chapter One. Description of the methods used in the statistical analysis of the data is provided. This chapter concludes with an explanation of the validity and reliability of the study, ethical considerations, and a summary that concludes Chapter Three.

3.2 RESEARCH METHOD

The focus of this study was on the relationship between the use of SNSs and student spectator behaviour in university sport. In this study a quantitative research approach was adopted. Quantitative methods are research methods dealing with numbers and anything that is measurable in a systemic way of investigation of phenomena and their relationships. It is used to answer questions on relationships with measurable variables with an intention to explain, predict, and control a phenomenon (Leedy, 1993). Further to this, quantitative research generates statistics through the use of large-scale survey research, using methods such as surveys (Dawson, 2002). The strengths of quantitative research include consistent, precise,
and reliable data that is relatively easy to analyze. A quantitative approach was considered to be the most appropriate for this study because it is suitable to study large populations and it allows for the examination and description of the relationship between the use of SNSs and student spectator behaviour in university sport.

3.3 RESEARCH DESIGN

Research design is the conceptual structure within which research is conducted (Kothari, 2004). It is simply the framework or plan for a study that is used as a guide in collecting and analyzing the data (Pandey & Pandey, 2015). The research design is a “blueprint” for empirical research aimed at answering specific research questions or testing specific hypotheses, and must specify at least three processes: (1) the data collection process, (2) the instrument development process, and (3) the sampling process (Bhattacherjee, 2012). A research design must at least contain a clear statement of the research problem, procedures, and techniques to be used for gathering information, the population to be studied, and the methods to be used in processed and analyzing of data as it facilitates various research operations, making research as efficient as possible (Kothari, 2004).

The aim of this study was to examine and describe the relationship between the use of SNSs and student spectator behaviour in university sport, by employing the cross-sectional research design. The intent of a cross-sectional study is aimed at finding out the prevalence of a phenomenon, situation, problem, attitude or issue, by taking a cross-section of a population (Kumar, 2011). Cross-sectional studies involve collecting information from any given sample of population just once (Wiid & Diggines, 2009) to obtain an overall “picture” of the current situation as it stands at the time of the study (Kumar, 2011).
3.4 RESEARCH SETTING

A naturalist method of data collection provides an ideal environment for the researcher to learn more and holistically understand human experiences in terms of context-specific settings (Guba & Lincoln, 1994; Patton, 1990). The setting being researched in this study is a historically disadvantaged and multicultural higher education institution situated in the Western Cape Province of South Africa. By international standards, Africa is the least developed region in terms of higher education institutions (Teferra & Altbach, 2004). Within its rich diversity, this higher education institution encapsulates distinct multiculturalism, a concept that aims for the political accommodation of difference, aspires to accommodate “ethno cultural diversity”, protect “individual rights”, and promote “non-discrimination” (Swartz, Arogundade, & Davis, 2014).

3.5 POPULATION AND SAMPLE

3.5.1 Population

In research, the term “population” refers to the entire mass of observations, which is the parent group from which a sample is to be formed (Pandey & Pandey, 2015). A population is defined as the total group of people or entities from which information is required (Wiid & Diggines, 2009). It can also be defined as all people or items known as unit of analysis, with characteristics that one wishes to study (Bhattacherjee, 2012). Therefore, the population of this study include approximately 24 000 full-time registered students at the higher education institution being researched.
3.5.2 Sampling

Sampling is the statistical process of selecting a sample of a population of interest for the purpose of making observations and statistical inferences about that population (Bhattacherjee, 2012). The process of sampling includes selecting a sample from a bigger group to become the basis for estimating or predicting the prevalence of an unknown piece of information, situation, or outcome regarding the bigger group (Kumar, 2011). Details regarding the sample size of this study is discussed in section 3.5.2.2.

3.5.2.1 Sampling technique

Probability sampling techniques are primarily used in quantitatively oriented studies that involve selecting a relatively large number of units from a population (Teddlie & Yu, 2007) and necessitates that knowledge of the population is an explicit prerequisite, i.e. it is only possible to conduct a probability sample if the ‘sampling frame’, i.e. the list of all possible units to be sampled, is known (Uprichard, 2011). The aim of probability sampling is to achieve representativeness to which the sample accurately represents the entire population (Teddlie & Yu, 2007). Random sampling was applied to this study since each participant of the population had an equal probability of being selected into the sample (Neuman, 2014). This type of sampling is a strategy in which each unit, either persons or cases, in the accessible population has an equal chance of being included in the sample, and the probability of a unit being selected is not affected by the selection of other units from the accessible population (Teddlie & Yu, 2007).

3.5.2.2 Determination of the sample size

A sample of 379 participants were extracted from the population, where the effect size of 0.5 with the accrual power of 0.8 (80%) was determined to arrive at the sample size using Raosoft, Inc. software (Raosoft, 2004). Determining the sample size included the following calculation:
\[ x = Z(\sqrt{100})^2 r(100 - r) \]

\[ n = \frac{N}{(N-1)} \left[ \frac{E^2}{\chi^2} + 1 \right] \]

\[ E = \text{Sqrt} \left[ \frac{(N-n)\chi^2}{n(N-1)} \right] \]

While 379 participants were calculated as an appropriate sample for this study, a total of 540 respondents participated in this study by completing the online survey.

### 3.6 RESEARCH INSTRUMENT

A modified online survey was administered to investigate the relationship between the use of SNSs and student spectator behaviour in university sport. Some advantages of online surveys can include higher response rates, reduced respondent error, reduced costs, reduced time, reduced need for coding, and improved design and aesthetics (Wright, 2005). The online survey contained closed-ended questions (Appendix C). Existing surveys relating to SNSs and student spectator behaviour were used to design an online survey for this study (Funk & James, 2004; Trail, Fink, & Anderson, 2003; Funk & James, 2001; Mahony, Madrigal, & Howard, 2000).

The first section of the online survey related to participant demographics. This section recorded demographic information of all participants including their age, sex, and ethnicity, level of study, registered faculty, accommodation, and internet access. The second section of the online survey related to participants’ use of SNSs. This section provided participants with an opportunity to identify the SNSs they had a profile for and the electronic device(s) used to access their SNSs. Section two of the online survey also allowed participants to indicate the time they spend visiting and interacting on their SNSs per day, as well as the activities they perform on their profiles. Participants identified the university sport SNSs they follow, and the participants rated questions relating to the importance of social networks for university sport,
their own level of confidence when they are online, and their excitement about using SNSs. The third section of the online survey related to participants’ spectator behaviour before, during, and after they attend university sports games. Section three of the online survey encouraged participants to rate their overall experience of university sports games and identify their feelings after attending university sports games.

The fourth section of the online survey related to participants’ attendance at university sports games. Section four of the online survey included questions that allowed participants to state whether they attend university sports games and their reason(s) for attending or not attending, the number of university sports games they attend per year, and the SNSs they interact with while attending university sports games. The fifth section of the online survey related to participants’ loyalty toward university sport. This section included questions on a likert scale that required participants to rate their answers as either Strongly Disagree, Disagree, Agree, or Strongly Agree. Section six of the online survey related to participants’ trust of information shared on university sport’s SNSs. Furthermore, section six included questions that required participants to rate their answers as either Strongly Disagree, Disagree, Agree, or Strongly Agree. The seventh section of the online survey related to participants’ commitment to supporting university sports teams. This section also included questions that required participants to rate their answers as either Strongly Disagree, Disagree, Agree, or Strongly Agree.

3.7 DATA COLLECTION PROCEDURE

3.7.1 Data collection for research study

In order to achieve the research objectives and to address the research question, this study draws on the primary data collection method, utilizing an online survey published in English.
Data was collected from full-time registered students at a higher education institution in the Western Cape Province of South Africa, using the random sampling technique. In order to collect data online, a link to the survey was included in an e-mail distributed to the research population via the registrar’s database of the institution. The period of collecting data occurred from 26 September 2017 until 29 October 2017. Data collection lasted four weeks with weekly reminder e-mails sent to participants. E-mails sent to participants included a link to the online survey. The online survey consisted of seven sections of questions. Once all questions were answered, participants were required to click the submit button in order for their responses to be recorded in an Excel spreadsheet of the Google Forms application. Data was automatically saved into the Excel spreadsheet. After the data collection period concluded, the researcher closed the online survey and downloaded the Excel spreadsheet from the Google Forms application. The researcher then coded the data and proceeded to analyze the data.

3.7.2 Pilot study

A pilot study was carried out to standardize the procedure and determine the validity and reliability (internal consistency) of the study survey. The research instrument was piloted by 20 participants to clarify whether questions posed in the survey were appropriate, determine the time taken to complete the online survey, and to obtain information to improve or further develop the design of the research study (Smith & Harrison, 2009).

3.8 VALIDITY AND RELIABILITY

The two primary criteria of evaluation in any measurement or observation are whether we are measuring what we intent to measure and whether the same measurement process would yield
the same results. The two concepts that can be used to determine the above are validity and reliability.

3.8.1 Validity

The survey was validated by administering it to the pilot-testing sample that are similar to the true sample used in the study as they were full-time registered students. One the other hand, those who participated in the pilot study were not part of the main participants of the actual study. The pilot-testing participants were easy to reach and participated in the pilot-testing of the research instrument in order to validate the instrument.

3.8.2 Reliability: Internal consistency

Testing for reliability is important as it refers to the consistency across the parts of a measuring instrument (Taherdoost, 2016). Reliability refers to the consistency of the results obtained (Gratton & Jones, 2004). The most appropriate and commonly used internal consistency measure is the Cronbach Alpha coefficient that includes no absolute rule, however, most agree on a minimum internal consistency coefficient of 0.70. The Cronbach Alpha coefficient applied to the survey was 0.82 for the first and second assessment.

3.9 STATISTICAL ANALYSIS OF DATA

The Google Forms application provides accurate, clean data since the data was directly inserted by the participants. Data was coded after the conclusion of the data collection period and then saved in an Excel spreadsheet. This data was imported to the Statistical Package for Social Sciences (SPSS) V.25 software for analysis.

Spearman rho correlation tests were conducted and inferential statistics were used to determine whether there were any associations between variables. This correlation analysis was deemed
suitable to determine whether the two main variables of this study, SNSs and student spectator behaviour, co-vary – whether as one variable increases the other tend to increase or decrease. Linear regression analyses were performed to determine the strength and direction of relationships between variables. A chi-square test was used to assess whether a relationship existed between the categorical variables of objective six, SNSs and student spectator behaviour. Descriptive statistics included percentages presented in the form of tables.

Margin error was set at 5%, therefore the confidence level was set at 95%. A 50% response distribution was accepted. A coefficient (R-value) of between +1 and -1 indicated an association between variables. In order to describe the strength of correlations, the following guideline was adopted: .00-.19 = very weak; .20-.39 = weak; .40-.59 = moderate; .60-.79 = strong; .80-1.0 = very strong. The variables in this study include demographics, SNSs, spectator behaviour, attendance, loyalty, trust, and commitment. Correlation analysis was conducted with a p-value of 0.05 as the level of significance that assisted in determining how SNSs, the independent variable, influenced student spectator behaviour, the dependent variable. Since mean and standard deviations are reported for continuous variables, this study comprised categorical variables, therefore standard deviations were not presented. However, individual responses for ratings and likert scale questions were calculated then converted into scores in order to summarize these statements and questions as on variable. These scores were then used to run the statistical analysis for the study.

3.10 ETHICS CONSIDERATIONS

Permission to conduct this study was sought from the University of the Western Cape (UWC) Research Ethics Committee (Humanities and Social Sciences Research Ethics Committee). Due to the nature of this study, permission to access the university’s student e-mail address database was obtained from the UWC’s Registrar. An e-mail was sent out to full-time
registered students, including information regarding the study. The information sheet for this study informed participants that their participation in this study was voluntary. Participants were also informed of the opportunity to withdraw from participating in this study at any time without any consequences. For students who required additional assistance in completing the survey, the researcher engaged with the Centre of Student Support Services to request face-to-face completion of the survey. The researcher ensured that the personally identifiable information of participants was not disclosed in this study, and no identities were used in writing up information of participants in the results chapter. The information sheet (Appendix A) and consent form (Appendix B) were e-mailed to all full-time registered students, and the e-mail included a link to the online survey. To ensure safe keeping for the research data, the data collected will be kept for up to five years by the researcher and supervisor at the Department of Sport, Recreation and Exercise Science at UWC. Thereafter the research data will be destroyed.

3.11 CHAPTER CONCLUSION

In summary, this chapter provided insight into the methodological approach utilized in this study. The research method and research design were outlined in detail. The research setting, population, sample, and research instrument was described, and the overall process of collecting data was discussed. Furthermore, the validity and reliability were discussed and the ethical considerations were also highlighted. The next chapter presents the results of the study.
CHAPTER FOUR
RESULTS

4.1 INTRODUCTION
The purpose of this study was to examine and describe the relationship between the use of SNSs and student spectator behaviour in university sport in the Western Cape. This chapter presents the results of data collected for this study. Survey results are presented in tables. Frequencies of results were presented in Section A with regard to the following variables: Demographic profile of participants, internet access of participants, participants’ visits on SNSs, and participants’ average time spent on SNSs.

Section B of this chapter presents statistical correlations and regression analyses of SNSs and student spectators. These results were presented in three sub-sections: Section A, demographic information of participants. Section B, results for study objectives. Section C, results based on the Decision-Making process for Sport Involvement model. Results were presented in this order because the various questions in the survey that related to the study objectives and theoretical framework were mutually exclusive. Furthermore, results of Section B were identified for the following dimensions of the theoretical framework: Awareness or Information search, Sport experience, Evaluation of experience, and Post-evaluation behaviour. Consequently, findings of these results were discussed in Chapter Five within these dimensions of the theoretical framework. This chapter ends with a summary of results, followed by a chapter conclusion.

4.2 SECTION A: DEMOGRAPHIC PROFILE OF PARTICIPANTS
Participants in this study were full-time registered students at a higher education institution in the Western Cape, South Africa. These participants were registered in various years of study,
ranging from Undergraduate to Postgraduate level. Selected as a result of random sampling, both male and female students participated in this study. Students’ various faculties of study were presented in this research including the faculties of Arts, Community and Health Sciences, Dentistry, Economic and Management Science, Education, Law, and Natural Science. Table 4.1 presents the demographic information relating to the participants of the study.
<table>
<thead>
<tr>
<th>Demographic variable</th>
<th>N (540)</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-22</td>
<td>346</td>
<td>64</td>
</tr>
<tr>
<td>23-27</td>
<td>115</td>
<td>21.3</td>
</tr>
<tr>
<td>28-32</td>
<td>28</td>
<td>5.2</td>
</tr>
<tr>
<td>33-37</td>
<td>22</td>
<td>4.1</td>
</tr>
<tr>
<td>38+</td>
<td>29</td>
<td>5.4</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>224</td>
<td>41.5</td>
</tr>
<tr>
<td>Female</td>
<td>316</td>
<td>58.5</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African</td>
<td>270</td>
<td>50.0</td>
</tr>
<tr>
<td>*Coloured</td>
<td>228</td>
<td>42.3</td>
</tr>
<tr>
<td>Indian</td>
<td>18</td>
<td>3.3</td>
</tr>
<tr>
<td>White</td>
<td>24</td>
<td>4.4</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foundation year</td>
<td>9</td>
<td>1.7</td>
</tr>
<tr>
<td>First year</td>
<td>133</td>
<td>24.6</td>
</tr>
<tr>
<td>Second year</td>
<td>131</td>
<td>24.3</td>
</tr>
<tr>
<td>Third year</td>
<td>115</td>
<td>21.3</td>
</tr>
<tr>
<td>Fourth year</td>
<td>44</td>
<td>8.2</td>
</tr>
<tr>
<td>Honours</td>
<td>45</td>
<td>8.3</td>
</tr>
<tr>
<td>Masters</td>
<td>51</td>
<td>9.4</td>
</tr>
<tr>
<td>PhD</td>
<td>12</td>
<td>2.2</td>
</tr>
<tr>
<td><strong>Faculty</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts</td>
<td>103</td>
<td>19.1</td>
</tr>
<tr>
<td>Community &amp; Health Science</td>
<td>155</td>
<td>28.7</td>
</tr>
<tr>
<td>Dentistry</td>
<td>8</td>
<td>1.5</td>
</tr>
<tr>
<td>Economic &amp; Management Science</td>
<td>115</td>
<td>21.3</td>
</tr>
<tr>
<td>Education</td>
<td>45</td>
<td>8.3</td>
</tr>
<tr>
<td>Law</td>
<td>34</td>
<td>6.3</td>
</tr>
<tr>
<td>Natural Science</td>
<td>80</td>
<td>14.8</td>
</tr>
<tr>
<td><strong>Accommodation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On campus</td>
<td>133</td>
<td>24.6</td>
</tr>
<tr>
<td>Off campus</td>
<td>407</td>
<td>75.4</td>
</tr>
</tbody>
</table>

*Coloured: Is a South African term for mixed ancestry.
Demographic Table 4.1 shows that this study consisted of 540 participants. Of these participants, 58.5% (n=316) were female and 41.5% (n=224) were male. The majority, 64% (n=346) participants were between the ages of 18-22 years, followed by 21.3% (n=115) participants aged between 23-27 years. Half of this study’s participants identified as African, comprising 50% (n=270) of the sample. Followed by 42.3% (n=228) comprising Coloured participants, with 4.4% (n=24) comprising of White participants and 3.3% (n=18), Indian participants. A 0.3% difference in the participants’ year of study exists with 24.6% (n=133) participants in their first year of study and 24.3% (n=131) participants in their second year of study. There were slightly fewer participants 21.3% (n=115) in their third year of study. A total of 28.7% (n=155) participants were registered in the faculty of Community and Health Sciences, followed by 21.3% (n=115) participants registered in the faculty of Economic and Management Sciences, and 19.1% (n=103) participants were registered in the faculty of Arts. Approximately three-quarters of the participants, 75.4% (n=407) lived off the university campus, and 24.6% (n=133) participants lived on the university campus.
Table 4.2 Internet access of participants

<table>
<thead>
<tr>
<th>Internet access variables</th>
<th>N(540)</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet access</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>458</td>
<td>84.8</td>
</tr>
<tr>
<td>No</td>
<td>81</td>
<td>15</td>
</tr>
<tr>
<td>Did not disclose</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>*Accessing the internet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADSL</td>
<td>51</td>
<td>9.4</td>
</tr>
<tr>
<td>3G dongle</td>
<td>38</td>
<td>7</td>
</tr>
<tr>
<td>Mobile data</td>
<td>336</td>
<td>62.2</td>
</tr>
<tr>
<td>Home Wi-Fi</td>
<td>198</td>
<td>36.7</td>
</tr>
<tr>
<td>University Campus Wi-Fi</td>
<td>400</td>
<td>74.1</td>
</tr>
<tr>
<td>Free Wi-Fi at public libraries</td>
<td>62</td>
<td>11.5</td>
</tr>
<tr>
<td>Free Wi-Fi at shopping malls</td>
<td>82</td>
<td>15.2</td>
</tr>
<tr>
<td>*Electronic devices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desktop Computer</td>
<td>146</td>
<td>27.6</td>
</tr>
<tr>
<td>Laptop</td>
<td>366</td>
<td>67.8</td>
</tr>
<tr>
<td>Smartphone</td>
<td>496</td>
<td>91.9</td>
</tr>
<tr>
<td>iPad</td>
<td>27</td>
<td>5</td>
</tr>
<tr>
<td>Android Tablet</td>
<td>86</td>
<td>15.9</td>
</tr>
</tbody>
</table>

*Multiple response question

Table 4.2 displays information relating to the internet access of the participants. A total, 85% (n=458) participants had access to the internet, and 15% (n=81) participants did not have access to the internet. Of the participants who had access to the internet, the most common method to access the internet was through the use of University Campus Wi-Fi, 74.1% (n=400), followed by 62.2% (n=336) participants who accessed the internet via mobile data, and 36.7% (n=198) participants who accessed the internet through home Wi-Fi connection. Smartphones (92% - n=496), laptops (68% - n=366) and desktop computers (28% - n=146) were the frequently used electronic devices to access social networking sites.
Table 4.3 Student spectators' visits on SNSs

<table>
<thead>
<tr>
<th>Visits on social networking site(s)</th>
<th>N(540)</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hourly</td>
<td>211</td>
<td>39</td>
</tr>
<tr>
<td>Daily</td>
<td>277</td>
<td>51</td>
</tr>
<tr>
<td>Weekly</td>
<td>46</td>
<td>9</td>
</tr>
<tr>
<td>Monthly</td>
<td>5</td>
<td>0.9</td>
</tr>
<tr>
<td>Never</td>
<td>1</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Table 4.3 shows how often participants visited their SNSs. A total, 51% (n=277) participants visited their SNSs daily, while 39% (n=211) participants visited their SNSs hourly, 9% (n=46) participants visited their SNSs weekly, 0.9% (n=5) participants visited their SNSs monthly, and 0.1% (n=1) participants never visited their SNSs.

Table 4.4 Average time spent on SNSs

<table>
<thead>
<tr>
<th>Average time variables</th>
<th>N(540)</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 2 hours</td>
<td>140</td>
<td>25.9</td>
</tr>
<tr>
<td>2-4 hours</td>
<td>193</td>
<td>35.7</td>
</tr>
<tr>
<td>5-8 hours</td>
<td>116</td>
<td>21.5</td>
</tr>
<tr>
<td>More than 8 hours</td>
<td>91</td>
<td>16.9</td>
</tr>
</tbody>
</table>

Table 4.4 displays the average time participants spent on their SNSs. A total, 36% (n=193) spent 2-4 hours on their SNSs per day, 26% (n=140) participants spent less than 2 hours on their SNSs per day, 22% (n=116) participants spent 5-8 hours on their SNSs per day, and 17% (n=91) participants spent more than 8 hours on their SNSs per day.
Table 4.5 Activities performed on SNSs

<table>
<thead>
<tr>
<th>Activities performed variables</th>
<th>N(540)</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upload pictures</td>
<td>498</td>
<td>92</td>
</tr>
<tr>
<td>Upload videos</td>
<td>328</td>
<td>61</td>
</tr>
<tr>
<td>Post a status update</td>
<td>453</td>
<td>84</td>
</tr>
<tr>
<td>Express a feeling on Facebook</td>
<td>255</td>
<td>47</td>
</tr>
<tr>
<td>Sent an inbox message on Facebook</td>
<td>400</td>
<td>74</td>
</tr>
<tr>
<td>Read a comment on Facebook</td>
<td>426</td>
<td>79</td>
</tr>
<tr>
<td>Tag friends</td>
<td>377</td>
<td>70</td>
</tr>
<tr>
<td>Shared a post</td>
<td>402</td>
<td>74</td>
</tr>
<tr>
<td>Shared your location</td>
<td>216</td>
<td>40</td>
</tr>
<tr>
<td>Posted a tweet</td>
<td>170</td>
<td>31</td>
</tr>
<tr>
<td>Read a comment on Twitter</td>
<td>198</td>
<td>37</td>
</tr>
<tr>
<td>Retweeted a post</td>
<td>160</td>
<td>30</td>
</tr>
<tr>
<td>Sent a direct message on Twitter</td>
<td>121</td>
<td>22</td>
</tr>
<tr>
<td>Sent a direct message on Instagram</td>
<td>244</td>
<td>45</td>
</tr>
<tr>
<td>“Like” photos on Instagram</td>
<td>326</td>
<td>61</td>
</tr>
</tbody>
</table>

*Activities performed on social networking sites*

Table 4.5 shows the activities participants performed on their social networking site(s). Five activities frequently performed on social networking site(s) included participants uploading pictures (92% - n=498), posting a status update (84% - n=453), reading a comment on Facebook (79% - n=426), sharing a post (74% - n=402), and sending an inbox message on Facebook (74% - n=400). The following activities were moderately performed: tag friends (70% - n=377), upload video clips (61% - n=328), “Like” photos on Instagram (61% - n=326), expressed a feeling on Facebook (47% - n=255), sent a direct message on Instagram (45% - n=244). Participants seldom: shared a location (40% - n=216), read a comment on Twitter (37% - n=198), posted a tweet (31% - n=170), retweeted a post (30% - n=160), and sent a direct message on Twitter (22% - n=121), on their social networking site(s).
SECTION A CONCLUSION

Section A presented the results that encapsulated the demographic profile of the study’s participants. These results included demographic information, internet access of participants, student spectator’s visits on their SNSs, average time spent on SNSs, and the activities student spectators performed on their SNSs.

The next section reveals the results that relates to the objectives of the study. These results of Section B include frequencies, Spearman rho correlations, linear regressions, and Pearson chi-square.
4.3 SECTION B: RESULTS FOR STUDY OBJECTIVES

This section of the chapter presents the results for the study objectives listed in Chapter One. Results for objective one that is to identify the SNSs used by student spectators, is presented as frequencies. Results for objectives 2-5 that is to: determine the relationship between the use of SNSs and student spectator attendance at university sports games; determine the relationship between the use of SNSs and student spectator loyalty toward university sport; determine the relationship between the use of SNSs and student spectator trust of information shared on university sports’ SNSs; and, determine the relationship between the use of SNSs and student spectator commitment to supporting university sports teams. The results of these aforementioned objectives are presented as Spearman rho correlations and linear regressions. Concluding the results for this section is the Pearson chi-square test results for objective six.

Results of Section C follows the results of objective six.

4.3.1 SNSs used by student spectators

Table 4.6 Frequencies for SNSs used by student spectators in university sport

<table>
<thead>
<tr>
<th>SNSs used variables</th>
<th>N(540)</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>473</td>
<td>87.6</td>
</tr>
<tr>
<td>Twitter</td>
<td>232</td>
<td>43</td>
</tr>
<tr>
<td>Instagram</td>
<td>352</td>
<td>65.2</td>
</tr>
<tr>
<td>*WhatsApp</td>
<td>500</td>
<td>92.6</td>
</tr>
<tr>
<td>*YouTube</td>
<td>259</td>
<td>48</td>
</tr>
<tr>
<td>*Snapchat</td>
<td>154</td>
<td>28.5</td>
</tr>
<tr>
<td>*Google+</td>
<td>212</td>
<td>39.9</td>
</tr>
<tr>
<td>*Pinterest</td>
<td>120</td>
<td>22.2</td>
</tr>
<tr>
<td>*LinkedIn</td>
<td>199</td>
<td>36.9</td>
</tr>
</tbody>
</table>

*SNSs used by student spectators in university sport
Descriptive statistics were used to identify the SNSs used by student spectators. Table 4.6 shows student spectators frequently used three SNSs, student spectators moderately used four SNSs, and student spectators seldom used two SNSs. A total of 92.6% (n=500) of student spectators used WhatsApp, while 87.6% (n=473) of student spectators used Facebook, and 65.2% (n=352) used Instagram. The most moderately used SNSs by student spectators is YouTube, 48% (n=259), with 43% (n=232) student spectators using Twitter. Google+ was used by 39.3% (n=212) student spectators, 36.9% (n=199) student spectators used LinkedIn. Few student spectators, 28.5% (n=154) used Snapchat and 22.2% (n=120) student spectators used Pinterest.

4.3.2 SNSs and student spectator attendance

<table>
<thead>
<tr>
<th>Social networking sites</th>
<th>Correlation Coefficient</th>
<th>P-value</th>
<th>N(540)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before attendance</td>
<td>.127*</td>
<td>.007</td>
<td>452</td>
</tr>
<tr>
<td>During attendance</td>
<td>.157*</td>
<td>.001</td>
<td>438</td>
</tr>
<tr>
<td>After attendance</td>
<td>.172*</td>
<td>&lt;0.001</td>
<td>460</td>
</tr>
</tbody>
</table>

*Significant at p<0.05

In order to determine the relationship between the use of SNSs and student spectator attendance at university sports games, the Spearman’s rho correlation test was performed between SNSs and attendance. Table 4.7 displays the correlation matrix for the variables of SNSs and attendance. The relationship between the use of SNSs and student spectator attendance at university sports games showed a very weak positive correlation for the use of SNSs during attendance of university sports games (r = .157) that was statistically significant (p = 0.01). The relationship between the use of SNSs and student spectator attendance at university sports games showed a very weak positive correlation for the use of SNSs after attendance of
university sports games (r = .172) that was statistically significant (p<0.01). The relationship between the use of SNSs and student spectator attendance at university sports games showed a very weak positive correlation for the use of SNSs before the attendance of university sports games (r = .127) that was not statistically significant (p = 0.07).

Table 4.8 Linear regression analysis for SNSs and student spectator attendance

<table>
<thead>
<tr>
<th>Variables</th>
<th>R Square</th>
<th>Std. Error of Estimate</th>
<th>F Statistic</th>
<th>β</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social networking sites</td>
<td>.019</td>
<td>9.977</td>
<td>10.335</td>
<td>-.137</td>
<td>-3.215</td>
<td>0.001</td>
</tr>
</tbody>
</table>

*Significant at p<0.05, Dependant variable: Attendance

The linear regression model reached significance, meaning that it successfully predicted attendance scores (F₁, 538) = 10.335, p<0.001. The model explained 1.9% of the variance in attendance scores. Participants’ attendance of university sports games was predicted by their use of social networking sites β = -.137, t = -3.215, p<0.001. For every increase in the use of social networking sites, spectator attendance decrease by -.13. In conclusion, the regression model explained that 1.9% of the variance in spectator attendance of university sports games is dependent on spectator’s use of SNSs.

4.3.3 SNSs and student spectator loyalty

Table 4.9 Correlation matrix for SNSs and student spectator loyalty

<table>
<thead>
<tr>
<th>Social Networking Sites</th>
<th>Correlation r</th>
<th>P-value</th>
<th>N(540)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loyalty</td>
<td>-.001</td>
<td>.981</td>
<td>538</td>
</tr>
</tbody>
</table>

*Significant at p<0.05

In order to determine the relationship between the use of SNSs and student spectator loyalty toward university sports games, the Spearman’s rho correlation test was performed between SNSs and loyalty. Table 4.9 displays the correlation matrix for the variables of SNSs and
loyalty. The relationship between the use of SNSs and student spectator loyalty toward university sports games showed a very weak negative correlation for the relationship between the use of SNSs and student spectator loyalty toward university sports games \((r = -0.001)\) that was not statistically significant \((p = 0.98)\).

### Table 4.10 Linear regression analysis for SNSs and student spectator loyalty

<table>
<thead>
<tr>
<th>Variables</th>
<th>R Square</th>
<th>Std. Error of Estimate</th>
<th>F Statistic</th>
<th>(\beta)</th>
<th>(t)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social networking sites</td>
<td>.004</td>
<td>6.477</td>
<td>1.955</td>
<td>-.060</td>
<td>-1.398</td>
<td>0.163</td>
</tr>
</tbody>
</table>

*Significant at \(p<0.05\), Dependant variable: Loyalty

No statistical significance was found \((F_{1, 538}) = 1.955, p = 0.163\). The linear regression model explained 0.4\% of the variance in loyalty scores. Student spectators’ loyalty was predicted by their use of SNSs, \(\beta = -0.060, t = -1.398, p = 0.163\). In conclusion, the regression model explained that 0.4\% of the variance in spectator loyalty toward university sport is dependent on spectator’s use of SNSs.

#### 4.3.4 SNSs and student spectator trust

### Table 4.11 Correlation matrix for SNSs and student spectator trust

<table>
<thead>
<tr>
<th>Social Networking Sites</th>
<th>Correlation r</th>
<th>P-value</th>
<th>N(540)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>-0.054</td>
<td>.210</td>
<td>538</td>
</tr>
</tbody>
</table>

*Significant at \(p<0.05\)

In order to determine the relationship between the use of SNSs and student spectator trust of information shared on university sports’ SNSs, the Spearman’s rho correlation test was performed between SNSs and trust. Table 4.11 displays the correlation matrix for the variables of SNSs and trust. The relationship between the use of SNSs and student spectator trust of
information shared on university sports’ SNSs showed a very weak negative correlation for the use of SNSs and trust ($r = -0.054$) that was not statistically significant ($p = 0.21$).

### Table 4.12 Linear regression analysis for SNSs and student spectator trust

<table>
<thead>
<tr>
<th>Variables</th>
<th>R Square</th>
<th>Std. Error of Estimate</th>
<th>F Statistic</th>
<th>$\beta$</th>
<th>$t$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social networking sites</td>
<td>.004</td>
<td>3.989</td>
<td>2.425</td>
<td>-.067</td>
<td>-1.557</td>
<td>.120</td>
</tr>
</tbody>
</table>

*Significant at $p<0.05$, Dependant variable: Trust

No statistical significance was found ($F_{1, 538} = 2.425, p = 0.120$). The linear regression model explained 0.4% of the variance in loyalty scores. Student spectators’ trust was predicted by their use of SNSs, $\beta = -.067$, $t = -1.557$, $p = 0.120$. In conclusion, the regression model explained that 0.4% of the variance in spectator trust of information shared on university sports’ social networking sites is dependent on spectator’s use of SNSs.

### 4.3.5 SNSs and student spectator commitment

#### Table 4.13 Correlation matrix for SNSs and student spectator commitment

<table>
<thead>
<tr>
<th>Social Networking Sites</th>
<th>Correlation r</th>
<th>P-value</th>
<th>N(540)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment</td>
<td>-.026</td>
<td>.555</td>
<td>538</td>
</tr>
</tbody>
</table>

*Significant at $p<0.05$*

In order to determine the relationship between the use of SNSs and student spectator commitment to supporting university sports games, the Spearman’s rho correlation test was performed between SNSs and commitment. Table 4.13 displays the correlation matrix for the variables of SNSs and commitment. The relationship between the use of SNSs and student spectator commitment to supporting university sports games showed a very weak negative correlation for the use of SNSs and commitment to supporting university sports games ($r = -0.26$) that was not statistically significant ($p = 0.55$).
Table 4.14 Linear regression analysis for SNSs and student spectator commitment

<table>
<thead>
<tr>
<th>Variables</th>
<th>R Square</th>
<th>Std. Error of Estimate</th>
<th>F Statistic</th>
<th>β</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social networking sites</td>
<td>.015</td>
<td>6.901</td>
<td>8.431</td>
<td>-.124</td>
<td>-2.904</td>
<td>.004</td>
</tr>
</tbody>
</table>

*Significant at p<0.05, Dependant variable: Commitment

The linear regression model reached significance, meaning that it successfully predicted commitment scores (F₁, 538) = 8.431, p<0.004. The model explained 1.5% of the variance in commitment scores. Student spectators’ attendance of university sports games was predicted by their use of SNSs, β = -.124, t = -2.904, p<0.004. For every increase in the use of SNSs, spectator commitment decrease by -.12. In conclusion, the regression model explained that 1.5% of the variance in spectator commitment to supporting university sports teams is dependent on spectator’s use of SNSs.

4.3.6 SNSs and student spectator behaviour

Table 4.15 Pearson chi-square matrix for SNSs and student spectator behaviour

<table>
<thead>
<tr>
<th>Attendance variables</th>
<th>Value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Networking Sites</td>
<td>Behaviour Before Attendance</td>
<td>427.620</td>
</tr>
<tr>
<td></td>
<td>Behaviour During Attendance</td>
<td>506.277</td>
</tr>
<tr>
<td></td>
<td>Behaviour After Attendance</td>
<td>496.936</td>
</tr>
</tbody>
</table>

*Significant at p<0.05

In order to determine the relationship between the use of SNSs and student spectator behaviour before, during and after attending university sports games, a Pearson chi-square test was conducted that showed statistical significance in table 4.15 of the relationship between the use of social networking sites and spectator behaviour during attendance (p = 0.00) and no statistical significance in the relationship between the use of SNSs and spectator behaviour before and after attendance (p = 0.21; p = 0.98).
SECTION B CONCLUSION

Section B presented results for objectives of the study. These results included frequencies, Spearman rho correlations, linear regressions, and Pearson chi-square.

The next section reveals the results based on the theoretical framework, the Decision-Making Process for Sport Involvement model.
4.4 SECTION C: RESULTS BASED ON THE DECISION-MAKING PROCESS FOR SPORT INVOLVEMENT MODEL

This section of the chapter presents the results that will be discussed through the dimensions of the theoretical framework in the next chapter. These results were presented as frequencies under the dimensions that constitutes the theoretical framework of the study that was introduced in Chapter Two. Results for Awareness or Information search, Sport experience, Evaluation of experience, and Post-evaluation behaviour dimensions of the theoretical framework are presented. A summary of results follows this section.

4.4.1 Awareness or Information search

Table 4.16 Attendance of university sports games and information

<table>
<thead>
<tr>
<th>Attendance variables</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>254</td>
<td>47</td>
</tr>
<tr>
<td>No</td>
<td>284</td>
<td>52.6</td>
</tr>
<tr>
<td>No answer</td>
<td>2</td>
<td>.4</td>
</tr>
</tbody>
</table>

Table 4.16 displays results for whether student spectators’ attendance of university sports games were based on information shared on university sports’ social networking sites. Majority of students, 53% (n=284) revealed that they did not attend university sports games based on information found on university sports’ social networking sites. Fewer students, 47% (n=254) indicated that they attended university sports games based on information found on the university sports’ social networking sites. The minority, .4% (n=2) of student spectators did not answer this question.
4.4.2 Sport experience

Table 4.17 Student spectators' experience of university sports games

<table>
<thead>
<tr>
<th>Experience variables</th>
<th>N(540)</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bad</td>
<td>152</td>
<td>28</td>
</tr>
<tr>
<td>Spectator experience of university sports games</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair</td>
<td>121</td>
<td>22</td>
</tr>
<tr>
<td>Good</td>
<td>144</td>
<td>27</td>
</tr>
<tr>
<td>Excellent</td>
<td>123</td>
<td>23</td>
</tr>
</tbody>
</table>

Results of the overall experience of university sports games presented in figure is based on questions relating to spectators’ traveling experience to and from the venue, the flow of traffic while entering and exiting the venue, signage directing spectators to various areas, parking space, cleanliness of the facility, value of concessions (food, snacks, and drinks), entertainment during half time, quality of the sound system, spectators’ level of enjoyment of university sports games, and the possibility of spectators attending university sports games in the future. Table 4.17 shows a 1% difference between a bad and good experience of spectators, with bad spectator experience leading at 28% (n=152) and 27% (n=144) of spectators indicating a good experience. A total of 23% (n=123) spectators experienced excellence at university sports games, while 22% (n=121) spectators reported a fair experience.

4.4.3 Evaluation of experience

Table 4.18 Student spectators' feelings after attending university sports games

<table>
<thead>
<tr>
<th>Feeling variables</th>
<th>N(540)</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feelings after attending university sports games</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excited</td>
<td>101</td>
<td>18.7</td>
</tr>
<tr>
<td>Happy</td>
<td>355</td>
<td>65.7</td>
</tr>
<tr>
<td>Sad</td>
<td>8</td>
<td>1.5</td>
</tr>
<tr>
<td>Bored</td>
<td>74</td>
<td>13.7</td>
</tr>
<tr>
<td>No answer</td>
<td>2</td>
<td>.4</td>
</tr>
</tbody>
</table>
Table 4.18 displays how student spectators felt after attending university sports games. Most student spectators, 66% \((n=355)\) felt happy after attending university sports games, 19% \((n=101)\) student spectators felt excited, 14% \((n=74)\) felt bored, 2% \((n=8)\) felt sad, and .4% \((n=2)\) student spectators did not answer the question.

4.4.4 Post-evaluation behaviour

Table 4.19 Student spectators’ satisfaction with university sport’s SNSs

<table>
<thead>
<tr>
<th>Satisfaction variables</th>
<th>N(540)</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>123</td>
<td>22.7</td>
</tr>
<tr>
<td>Seldom</td>
<td>115</td>
<td>21.3</td>
</tr>
<tr>
<td>Sometimes</td>
<td>151</td>
<td>28.0</td>
</tr>
<tr>
<td>Often</td>
<td>102</td>
<td>18.9</td>
</tr>
<tr>
<td>Always</td>
<td>47</td>
<td>8.7</td>
</tr>
<tr>
<td>No answer</td>
<td>2</td>
<td>.4</td>
</tr>
</tbody>
</table>

Table 4.19 displays results for student spectators’ satisfaction with updates posted on university sports’ SNSs. Majority of student spectators, 28% \((n=151)\) revealed that sometimes they were satisfied with the updates posted on university sports SNSs, 23% \((n=123)\) student spectators were never satisfied, and 21% \((n=115)\) student spectators were seldom satisfied. Fewer student spectators, 19% \((n=102)\) reported that they were often satisfied with university sports updates, while 9% \((n=47)\) stated they were always satisfied, and .4% \((n=2)\) student spectators did not answer the question.

SECTION C CONCLUSION

Section C presented results based on the study’s theoretical framework, the Decision-Making Process for Sport Involvement model. These results were presented as frequencies within the
following dimensions of the theoretical framework: Awareness or Information search, Sport experience, Evaluation of experience, and Post-evaluation behaviour. This chapter continues with the summary of results and the chapter conclusion.

4.5 SUMMARY OF RESULTS

This chapter showed that male and female student spectators participated in this study, with the majority of participants were African female students, aged 18-22 years, registered in their first year of study. The majority of participants were registered in the Faculty of Community and Health Sciences and lived off the university campus. Additional frequency analyses revealed that the majority of student spectators had access to the internet that was commonly accessed through University Campus WiFi, by the use of smartphones. Student spectators visited their SNSs daily and spent an average time of 2-4 hours online, usually uploading photos, posting status updates, or reading comments on Facebook.

With regards to the objectives of this study, WhatsApp, Facebook, and Instagram were identified as the SNSs commonly used by student spectators. Statistical correlations were conducted for objectives 2-5, indicating a statistically significant association for the use of SNSs during and after student spectators attended university sports games. No statistical significance was found for the relationship between the use of SNSs before student spectators attended university sports games. In addition, no statistical significance was found between the use of SNSs and student spectators’ loyalty toward university sport, trust of information shared on university sport’s SNSs, and commitment to supporting university sports teams.

https://etd.uwc.ac.za
Further regression analyses of objectives 2-5 were conducted to determine whether the use of SNSs predicted student spectator attendance of university sports, whether the use of SNSs influenced student spectator loyalty toward university, their trust of information shared on university sports’ SNSs, and their commitment for supporting university sports teams. Regression analyses for each relationship concluded with an indication of the percentage of variance that influenced the prediction between the use of SNSs and the different variables.

4.6 CHAPTER CONCLUSION

In summary, this chapter provided the descriptive and inferential statistics of the relationship between the use of SNSs and student spectator behaviour in university sport. Statistical frequencies, correlations, and regression analyses were deemed appropriate methods to infer the required statistics relating to demographics, internet access, visits on SNSs, average time spent on SNSs, experiences of university sports games, activities performed on SNSs, as well as the relationships between the use of SNSs and the variables relating to behaviour: attendance, loyalty, trust, and commitment.

The next chapter provides a discussion of the results presented in this current chapter through the lens of the decision-making process for sport involvement model. Conclusions are drawn and recommendations for further research and practice are presented.
CHAPTER FIVE

DISCUSSION, SUMMARY OF FINDINGS, RECOMMENDATIONS, AND CONCLUSION

5.1 INTRODUCTION

The focus of this study was guided by the research question which was to examine and describe the relationship between the use of SNSs and student spectator behaviour in university sport. This research document comprised of five chapters. The researcher provided a background, introduction, and motivation for the study in Chapter One. In Chapter Two, the researcher provided a review of literature which examined the use of SNSs in sport and presented the theoretical framework applied to this study. Chapter Three detailed the methodological considerations for this study, research method, and research design. A quantitative research method was selected to perform an examination of the relationship between the use of SNSs and student spectator behaviour for this study. In Chapter Four, the results of the examination were displayed. Chapter Five outlines the discussion of the study, summary of findings through the lens of the theoretical framework, conclusions related to the findings, study limitations, recommendations for practice and further research, as well as the study conclusion.

Student spectator behaviour in university sport and their use of SNSs were among the main variables measured with the use of a compiled online survey as the data collection tool for this study. The researcher compiled an online survey (Appendix C) relating to SNSs and student spectator behaviour. The Decision-Making Process for Sport Involvement model (Blackwell, Miniard, & Engel, 2001) was used as a framework to guide the data collection and analysis. Study results provided data relating to the usage of SNSs among a segment of university sports fans and allowed for us to fill the picture in somewhat with regard to the relationship between the use of SNSs and student spectator behaviour in university sport. Therefore, the following
discussion is based on the study objectives presented earlier in Chapter One and the Decision-Making Process for Sport Involvement model presented in Chapter Two.

For consistency, Chapter Five is presented as a mirror image to Chapter Four with Section A first displaying the discussion, summary of findings, and conclusions that related to the study objectives. Section B follows by showcasing the discussion, summary of findings, and conclusions that related to the Decision-Making Process for Sport Involvement model. Summary of findings related to the Decision-Making Process for Sport Involvement model is presented through four different dimensions of the model, namely Awareness or Information search, Sport experience, Evaluation of experience, and Post-evaluation behaviour. Thereafter the limitations of the study, recommendations, and study conclusion is presented.

This chapter concludes the results presented in Chapter Four based on the dimensions found within the theoretical framework of this study. The framework was used to interpret the relationship between the used of SNSs and student spectator behaviour in university sport.
5.2 SECTION A: DISCUSSION, SUMMARY OF FINDINGS, AND CONCLUSIONS FOR STUDY OBJECTIVES

Section A includes the discussion, summary of findings, and conclusions related to the objectives of this study.

5.2.1 DISCUSSION OF RESULTS FOR STUDY OBJECTIVES

5.2.1.1 SNSs used by student spectators

WhatsApp, Facebook, and Instagram were found to be the most frequently used SNSs, indicating its prevalence among student spectators of university sport. It is not surprising that WhatsApp proved to be the most frequently used among the top three SNSs. This communication tool allows users to share different types of media files including photos, videos, voice messages, and instant messages with friends and family through the main requirement of an internet connection on mobile smartphone devices.

By accessing an internet connection, WhatsApp is an affordable means of communication. In that respect, with regard to the affordability of WhatsApp, student spectators may have preferred to keep their internet expenses minimal. Subsequently limiting access to their SNSs through other forms of internet access such as ADSL or home Wi-Fi. This interpretation was evident as student spectators highlighted that they commonly accessed their SNSs through University Campus Wi-Fi, as opposed to other forms of accessing the internet, which is more expensive. Previous research by Giodano et. al., (2017) concedes that an internet connection is required for the WhatsApp application to send and receive multimedia messages such as photos, videos, and voice messages, further suggesting that the use of WhatsApp is more
affordable to student spectators since they have the option to access and utilize University Campus Wi-Fi as opposed to purchasing mobile data.

The aforementioned interpretation may also be applicable to the frequent use of Facebook. Facebook is a cost-effective method of conveniently distributing various types of media files, such as photos, videos, posting updates, comments, and creating events, of substantial information that could be accessed and used over extended periods as it is easily posted and stored on this SNS. Similarly, results of the popularity in the use of Facebook and the assumption that it is affordable to access, echoes the offering of Pronschinske et. al., (2012) that Facebook is commonly used because costs are minimal.

Similarly, Instagram features longevity in its shelf-life for content posted on this SNS. This SNS may also prove to be popular among student spectators with regard to the features that allowed student spectators to take photos, share photos, share videos, and send direct messages without excessive texts accompanying the media file that was shared. Consequently, ensuring that the photos and videos shared on Instagram remained the main attraction of the post, with permanence that secured access to these posts at a later stage. Corroborating the discussion of Instagram is the sentiment of Lee, et. al., (2015) that indicated Instagram allows users to transform their images and document their stories through photos and short videos, then keeping it as a memory for forever.

5.2.1.2 SNSs and student spectator attendance

Student spectators’ use of SNSs were examined in relation to their attendance of university sports games. Their use of SNSs was examined before, during, and after they attended university sports games. Statistical significance was found in student spectators’ use of SNSs
during and after they attended university sports games. This may suggest student spectators had access to the University Campus Wi-Fi which enabled them to access their SNSs during their attendance of university sports games.

It could also be speculated that student spectators felt closer to their favourite university sports team, that subsequently influenced their use of SNSs during attendance. Student spectators may have felt a stronger affiliation to their favourite team, thus demonstrating their patriotism that further encouraged their use of SNSs. The use of SNSs after student spectators attended university sports games may be related to heightened satisfaction of the entertainment experienced during the game including a team mascot, cheering and dance squads, as well as crowd participation games. Student spectators may have been interested in sharing these experiences through their SNSs regardless of whether their favourite team won or lost a game. Another study by Wakefield (1995) listed team identification as a predictor of spectator attendance of sports games, supporting the relationship between the use of SNSs during student spectators’ attendance of university sports games as an indicator that student spectator’s patriotism of university sport may be the basis for their interaction on their SNSs during their attendance.

Contrary to these results, no association was found between student spectators’ use of SNSs before attending university sports games. This finding may be attributed to limited accessibility to internet access before university sports games, or to insufficient university sports events exposure through online social media strategies including SNSs, university sports’ website, and university campus email communication. Another attributing factor may be a lack of student spectator involvement in marketing and sales promotion of university sports events such as free-ticket giveaways, competitions before the game, promoting team merchandise, and
re-living triumphant moments of previous successful university sports games through social media platforms.

An extensive statistical analysis with the linear regression model reached statistical significance that explained student spectator attendance of university sports games were dependent on their use of SNSs. This result showed a clear contradiction to the correlation that reported no relationship between student spectators’ use of SNSs before attending university sports games. Since student spectators’ use of SNSs predicted their attendance of university sports games but no evidence exists to support their interaction on their SNSs before their attendance of university sports games, it could be assumed that, as previously mentioned, student spectators may not have internet access outside the university campus. This may be a plausible assumption considering that most student spectators reported that they lived off the university campus, in private or family residences. A recent study by Haught et al., (2016) used multiple regression analysis to test whether the use of SNSs was a predictor of sports game attendance and yielded contradictory results and found no statistical significance in the dependence of sports game attendance on the use of SNSs.

5.2.1.3 SNSs and student spectator loyalty

The relationship between the use of SNSs and student spectator loyalty toward university sports games was not statistically significant. This indicates that there was no relationship between student spectators’ use of SNSs and their loyalty toward university sports games, which meant that student spectator loyalty was not dependent on or influenced by their use of SNSs.

However, the previous finding that revealed the relationship between the use of SNSs during spectator attendance of university sports games contradicts this current finding that shows no
relationship between student spectators’ use of SNSs and their loyalty. Statistical significance in the finding that a relationship existed between student spectators’ use of SNSs during their attendance could suggest that student spectators demonstrated loyalty toward university sport through their use of SNSs only while they attended university sports games, regardless of the status of their favourite team. This assumption could be attributed to the regression analysis that explained 0.4% of the variance in student spectator loyalty toward university sport was predicted by their use of SNSs. Subsequently in agreement with Neale and Funk (2005) that loyal fans resist the temptation to switch to a ‘more successful’ team during a losing season.

In addition, it may be interpreted that student spectators demonstrated loyalty to university sports games outside the scope of their SNSs, possibly through their behaviour of repeatedly attending university sports games live in the university stadium, purchasing team merchandise, and wearing the colours of their favourite team. Similarly, a study by Yoon et. al., (2017) confirmed three determinants of fan loyalty including team attraction, team trust, and team involvement that positively influenced team attachment, which further positively led to fan loyalty. This study by Yoon et. al., (2017) also contradicted this finding that no relationship existed between the use of SNSs and student spectator loyalty by reporting that sports fans’ Twitter use significantly reinforced their loyalty.

5.2.1.4 SNSs and student spectator trust

Student spectators’ trust of information shared on university sport’s SNSs was examined in relation to their use of SNSs and revealed no statistical significance. This clearly indicates that there was no relationship between student spectators’ use of SNSs and their trust of information shared on university sports’ SNSs, which meant that student spectators’ trust was not dependent on or influenced by their use of SNSs.
It could be interpreted by this finding that student spectators were not confident in the information shared on university sports’ SNSs and questioned whether the information shared was accurate or current. A lack of confidence in information shared on university sports’ SNSs could fuel the contribution presented in section 5.2.1.2 above that proposed an inquiry to determine whether university sport adequately shared information on their SNSs. Particularly since previous results found no relationship between the use of SNSs before they attended university sports games. Without any evidence supporting student spectators’ loyalty, and use of SNSs before attending university sports games, the majority of student spectators could have inevitably questioned the reliability of the information shared on the university sports’ SNSs. This may further allude to the result of the regression analysis that showed only 0.4% of student spectators’ trust of information shared on university sports events was predicted by their use of SNSs.

Although, in contradiction to the previous interpretation, another assumption could be that student spectators may have trusted information shared on university sports’ SNSs by their friends, as opposed to that of the information shared by university sport department itself. Results for the activities performed on SNSs supports the aforementioned contradiction that revealed reading comments on Facebook and sharing posts were among the top five activities generally performed on student spectators’ SNSs. This confirms the hypothesis of Ridings and Gefen (2002) that participants’ trust in the ability of others in online spaces would be positively related to their willingness to provide and retrieve information from others, contradictorily to the finding of this current study, proving that trust is a significant predictor of online spaces, especially for members to retrieve information.
5.2.1.5 SNSs and student spectator commitment

Student spectator commitment to supporting university sports games was found to have no relation to their use of SNSs. This indicated that there was no relationship between student spectators’ use of SNSs and their commitment to supporting university sports teams, suggesting that student spectator commitment was not dependent on or influenced by their use of SNSs.

This finding could suggest that student spectators’ commitment to supporting their favourite university sports team on their SNSs have decreased since student spectators have not been encouraged to remain committed to supporting their favourite team. It could be assumed that the higher education institution researched in this study have fallen short with their online social media presence that would induce positive consumption behaviour that could lead to a deeper sense of student spectator commitment to supporting university sports teams through online social media platforms. Further supporting a claim of Fernandes et. al., (2013) that the role of sports commitment has never been used to understand media consumption.

The study conducted by Fernandes et. al., (2013) contradicts the findings of this research because after examining sport consumer behaviour such as media consumption, these researchers reported that sports commitment positively influenced media consumption of sports consumer behaviour. This shows that understanding student spectator commitment toward university sport may be further nurtured through student spectators’ consumption of the information shared on university sports’ SNSs. Encouraging student spectator commitment through online social media platforms may increase student spectator interaction with university sports’ SNSs, thus deepen their loyalty and commitment to university sport. Another study by Tachis and Tzetzis (2015) reported significant results after hypothesizing that
spectator involvement influenced psychological commitment, that would eventually influence sports fans’ behavioural loyalty.

5.2.1.6 SNSs and student spectator behaviour

This study viewed student spectator behaviour in lieu of attendance, loyalty, trust, and commitment of university sport. As a result, the relationship between the use of SNSs and student spectator behaviour was discussed within these parameters, by considering these behaviours before, during, and after student spectator attendance of university sports games. The relationship between the use of SNSs and student spectator behaviour during university sports attendance was statistically significant. This indicated that student spectators expressed their loyalty toward university sport, they trusted the information shared on university sport’s SNSs, and they were committed to supporting their favourite university sports teams through the use of their SNSs while they attended university sports games.

It could be interpreted that student spectators had a positive, all-encompassing experience of university sport during their attendance, supporting the finding that a relationship exists between the use of SNSs and student spectator behaviour during their attendance of university sports games. However, despite this positive association, it may be assumed that student spectators did not engage with university sport on their SNSs before and after their attendance, which could explain the dissociation of their behaviour regarding loyalty, trust, and commitment before and after attendance. Furthermore, another contradiction is evident in the correlation matrix that reported a relationship for student spectators’ use of SNSs after their attendance, whereas no relationship was found in student spectators’ behavioural demonstration of loyalty, trust, and commitment of SNSs after their attendance of university sports games.
This suggests that student spectators did not demonstrate behaviour of loyalty, trust, or commitment to university sport through their SNSs after attending university sports games, which could mean that although student spectators advocated loyalty, trust, and commitment during their attendance, they may not have been compelled to express these sentiments after their attendance. A study by Van Scott (2013) supports this assumption with the investigation of the relationship between social media and fan behaviour, reporting that fans described themselves as highly motivated but medium to light users of Twitter.

5.2.2 SUMMARY OF FINDINGS FOR STUDY OBJECTIVES

5.2.2.1 SNSs used by student spectators

The most frequently used SNSs by student spectators of university sport were identified through question 9 of the online survey (Appendix C) that asked student spectators to select the SNSs for which they had a profile at the time of completing the online survey. Student spectators’ responses gave rise to the following findings:

1. WhatsApp
2. Facebook
3. Instagram

Findings in this study indicated that WhatsApp, Facebook, and Instagram were the three most frequently used SNSs among student spectators. These findings to a larger extent confirm findings in research on the most frequently used SNSs in sport. A similar study by Haugh & Watkins (2016) that investigated various social media platforms used by sports fans namely Facebook, Snapchat, Instagram, Twitter, Pinterest, and Tumblr, identified Facebook, Snapchat, and Instagram as the most frequently used SNSs, while Twitter, Pinterest, and Tumblr were rarely used. Another study by Agbo (2015) assessed the use of social media for sports
communication by uncovering the social media platforms with the highest engagement in sports communication among sports fans, players, journalists, sports administrators, sports educators, and club managers. Of the five options listed in the survey including Facebook, Twitter, LinkedIn, WhatsApp, and 2go, the most commonly used SNSs were Facebook, Twitter, and 2go, with WhatsApp and LinkedIn lagging behind (Agbo, 2015).

5.2.2.2 SNSs and student spectator attendance

Student spectator attendance of university sports games were comprised of three different stages throughout the presentation of this study. Therefore, the following findings regarding the relationship between the use of SNSs and student spectator attendance of university sport was determined with consideration of these three stages, specifically:

1. Before attendance
2. During attendance
3. After attendance

It was found that student spectators’ usage of their SNSs varied at different stages of their attendance of university sports games. Findings of this study indicate that student spectators were more inclined to use their SNSs during and after their attendance of university sports games, as opposed to using their SNSs before they attended university sports games. These findings corroborated that of Clavio and Walsh (2014) who concluded that fans of college athletics continuously interact with social media throughout the game. Furthermore, another study by Haught et al., (2016) suggested that fans talk to each other online while attending sports games, indicating that the use of SNSs is a widely used tool for spectators of sports games.
5.2.2.3 SNSs and student spectator loyalty

Student spectator loyalty toward university sports teams were determined by a series of questions in section E of the online survey (Appendix C). It was found in this study that student spectators were not loyal toward university sports teams.

Findings of this study challenged that of a study by Kim, Liu and Shan (2017) which hypothesized college students’ sports social media use would be positively related to college attachment, and reported social media as a strong predictor of college attachment, that led to college loyalty. Another study by Kang (2015) examined the relationship between mobile content dimensions as well as attitudinal and behavioural loyalty of young professional sports fans, and reported a positive association for both attitudinal and behavioural loyalty. In addition, a study by Flanigan (2014) investigated the impact fantasy sport participation had on team loyalty and reported that as the level of fantasy sport participation increases, there was an increase in attitudinal loyalty towards the favourite team.

5.2.2.4 SNSs and student spectator trust

The trust of student spectators regarding information shared on university sports’ SNSs were investigated through the list of questions in section F of the online survey (Appendix C). Student spectators of this study revealed they did not trust information shared on university sport’s SNSs. This finding contradicts that of existing research. According to Yoon et. al., (2017) team trust is a contributing factor that positively relates to team attachment, that in turn positively influences the loyalty of sports fans, proving that student spectator trust has a snowball effect on their loyalty toward university sport.
5.2.2.5 SNSs and student spectator commitment

Commitment of student spectators’ support to university sports games was determined by a series of questions in section G of the online survey (Appendix C). It was found that student spectators of this study were not committed to supporting the sport teams of the university under investigation in this research study. These finding of this study contradict that of a study by Fernandes et. al., (2013) that examined the relationships between sport commitment and three types of sport consumer behaviours including participation frequency, sporting goods, and media consumption, with the intention of proving their hypotheses that stated sport commitment positively influenced participation frequency, sport commitment positively influenced consumption of sporting goods, and sport commitment positively influenced media consumption. The main finding of the aforementioned study, that relates to this current study is that of the relationship between sports commitment and media consumption. Furthermore, the study proceeded to report sports commitment positively influenced media consumption.

5.2.2.6 SNSs and student spectator behaviour

Student spectator behaviour comprised of different considerations mentioned earlier in Chapter Two, namely attendance of university sports games, loyalty toward university sport, trust of the information shared on university sports’ SNSs, and commitment to supporting university sports teams. It was found that student spectator behaviour had a statistically significant correlation to their use of SNSs during their attendance of university sports games. This indicated that student spectators actively demonstrated their loyalty toward university sport, they trusted information shared on university sports’ SNSs, and they were committed to supporting their favourite university sports’ team while they attended university sports games. This finding was concurred in a study by Dwyer et. al., (2016) that concluded spectator behaviour as an outcome variable, dependent on event attendance and internet usage.
5.2.3 CONCLUSIONS RELATED TO THE SUMMARY OF FINDINGS FOR STUDY OBJECTIVES

This study set out to examine the research question: How does the use of SNSs influence student spectator behaviour in university sport? To this end, student spectators of university sport were invited to complete an online survey. The online survey questions were guided by the objectives of this study and the theoretical framework, the Decision-Making Process for Sport Involvement model. Conclusions related to the theoretical framework will be discussed below in section 5.3.3.

From the findings relating to the study objectives, it can be concluded that:

5.2.3.1 SNSs used by student spectators

- With regard to the SNSs frequently used by student spectators, WhatsApp, Facebook, and Instagram were identified as the top three SNSs used among student spectators of university sport.

5.2.3.2 SNSs and student spectator attendance

- Student spectators commonly used their SNSs during and after their attendance of university sports games.

5.2.3.3 SNSs and student spectator loyalty

- In an attempt to investigate student spectators’ loyalty toward university sport, it was found that student spectators were not loyal toward university sport.

5.2.3.4 SNSs and student spectator trust

- Student spectators did not trust the information shared on university sports’ SNSs.
5.2.3.5 SNSs and student spectator commitment

- Student spectators were not committed to supporting university sports teams.

5.2.3.6 SNSs and student spectator behaviour

- Loyalty toward university sport, trust of information shared on university sport’s SNSs, and commitment to supporting university sports teams were only expressed during student spectators’ attendance of university sports games.

- These behavioural factors highlighted in the preceding finding was not found before and after student spectators attended university sports games.

5.2.4 SECTION A CONCLUSION

Section A included the discussion, summary of findings, and conclusions related to the objectives of the study.

The next section presents the discussion, summary of findings, and conclusions based on the theoretical framework of the study, the Decision-Making Process for Sport Involvement model.
5.3 SECTION B: DISCUSSION, SUMMARY OF FINDINGS, AND CONCLUSIONS FOR DECISION-MAKING PROCESS OF SPORT INVOLVEMENT MODEL

Section B includes the discussion, summary of findings, and conclusions related to the Decision-Making Process for Sport Involvement model.

5.3.1 DISCUSSION OF RESULTS FOR DECISION-MAKING PROCESS FOR SPORT INVOLVEMENT MODEL

5.3.1.1 Student spectators’ attendance of university sports games and information shared

On the premise of the awareness or information search dimension of the theoretical framework applied to this study, student spectators’ attendance of university sports games was investigated based on the information shared on the university sports SNSs. It was revealed that the majority of student spectators did not attend university sports games based on the information shared on university sport’s SNSs.

This finding presents a diplomatic position that insinuates various assumptions that could be discussed. First, student spectators may have attended university sports games by retrieving the relevant information through other forms of communication, such as word-of-mouth. Second, university sport may not have adequately shared information regarding university sports games on their SNSs. Third, student spectators may not have been informed of university sports games at all through university sports’ SNSs. However, the latter contradicts earlier results that revealed student spectators visited their SNSs daily and spent an average of 2-4 hours browsing their SNSs. This assumption further contributes to possible reasons that no association was found between student spectators’ use of SNSs before attending university sports games. To
this end, the online social media presence of university sport may subsequently be investigated to determine whether adequate effort is placed into communicating university sports events to student spectators, and if so, to what extent these online social media communication strategies are effective with regard to information sharing.

5.3.1.2 *Student spectators’ experience of university sports games*

Results presented in Chapter Four for student spectators’ experience of university sports games, revealed that the majority of student spectators generally had a good overall experience at university sports games, and the minority of student spectators reported a bad experience of university sports games. Reasons for this good experience and the stage it was experienced at - whether it was experienced while traveling to the venue, the main experience, or traveling from the venue - may not have been determined within this study since this determination was outside the scope of the study objectives. However, it could be assumed that student spectators enjoyed the main university sports events, as evident in their expression of happiness after attending university sports games. Additional assumptions may be made that considers gender-based differences in spectator behaviour that may have contributed to student spectators’ overall experience of university sport.

These assumptions are made on the premise that the majority of student spectators reported that they felt happy after attending university sports games, and the differences in the number of male and female participants of the study, with the majority of student spectators in this study reported to be female, and the minority reported as male student spectators. Gender-based differences have previously been related to their attendance and consumption of sport Fink et al., (2002), which is further supported by the statement of Bahk (2002) that a contributing factor to spectator behaviour is the behavioural differences between male and female spectators.
5.3.1.3 Student spectators’ feelings after attending university sports games

This study analyzed whether student spectators felt excited, happy, sad, or bored after they attended university sports games. It was found that most student spectators felt happy after they attended university sports games. The majority of student spectators felt happy after attending university sports games because they experienced their consumption of the main university sports games as intrinsically rewarding, which led to positive emotional experiences. Similar findings were reported by Stander and Zyl (2016) who investigated how motives for sport consumption predicted intrinsic psychological reward of South African premier league football spectators and reported that a model for intrinsic psychological rewards through the motivation for sport consumption was confirmed. Further establishing that motivation for sport consumption was significantly and positively related to and associated with the experience of intrinsic psychological reward by South African football players.

The assumption that university sports games could be intrinsically rewarding is made on the premise that student spectators’ relationship between their use of SNSs and their spectator behaviour at university sports games revealed a positive association. On this account, it could further be assumed that student spectators were intrinsically rewarded with positive emotional experiences while they attended university sports games that made them feel happy, and consequently they interacted with their SNSs during their attendance of university sports, thus giving rise to the positive association between the use of SNSs and their spectator behaviour.

A study by Potter and Keene (2012) supports this finding after conducting an experiment that investigated the impact of fan identification on the cognitive and emotional processing of sports-related news media, reporting that highly identified fans process sports-related news content differently than moderate fans.
5.3.1.4 Student spectators’ satisfaction with university sport’s SNSs

The results for student spectators’ satisfaction with university sport’s SNSs reported that student spectators were satisfied with the updates posted on university sport’s SNSs. This satisfaction was further evident in student spectators’ use of SNSs during their attendance and their feelings of happiness after they attended university sports games. Corroborating findings of Haugh and Watkins (2016) who testified the importance of using SNSs to satisfy spectators by reporting that SNSs were used to satisfy specific gratification for informational purposes, for entertainment, interpersonal communication, fanship, team support, fan expression, to pass time, and as an escape.

However, considering that nearly half the percentage of student spectators reported they were not satisfied with the information shared on university sport’s SNSs, it may be assumed that these student spectators’ needs were not met by the information shared on university sports’ SNSs. The aforementioned assumption is contradictory to the study by Gibbs et al., (2014) who explored the motivation and satisfaction for Twitter followers of professional sport teams, reporting that Twitter users sought primary gratification through interaction, promotion, live game updates, and news. Findings that revealed nearly half the percentage of student spectators’ were not satisfied with the information shared on university sports’ SNSs, which is supported by Clavio and Walsh (2014) who sought to understand why college sport fans engaged in sport-focused social media use and revealed that content creation was an identified factor in the dimensions of gratification for social media use.
5.3.2 SUMMARY OF FINDINGS FOR DECISION-MAKING PROCESS FOR SPORT INVolVEMENT MODEL

Participants of this study completed an online survey with regard to their use of SNSs to determine their spectator behaviour within university sport. The summary of findings which follows is presented through the lens of the theoretical framework of this study, the Decision-Making Process for Sport Involvement model. These findings are presented within four dimensions of the theoretical framework, namely: Awareness or Information search, Sport experience, Evaluation of experience, and Post-evaluation behaviour.

5.3.2.1 Student spectators’ awareness of university sports games

The second dimension of the Decision-Making Process for Sport Involvement model is awareness or information search. This dimension considered whether student spectators had prior knowledge of university sports games that the use of SNSs could satisfy. Awareness or information search was investigated in the following way:

1. Student spectators were asked whether they attended university sports games based on the information shared on the university sports’ SNSs.

Student spectator awareness or information search gave rise to the following finding:

1. The majority of student spectators did not attend university sports games based on information shared on university sports’ SNSs.

This finding suggests that students may have attended university sports games based on information shared through alternative forms of communication. Supporting this finding is a study by Clavio and Walsh (2014) that investigated the kinds of media student sports fans used to interact with collegiate athletics and found that student spectators primarily used traditional media, stating that this reality could present a problem for college athletic departments interested in integrating online social media into their marketing strategies. In contradiction,
however, a study by Hambrick (2012) explored how sporting event organizers of a bicycle race used Twitter to spread information about the event and which followers helped accelerate the spread of information through the online social network. This study by Hambrick (2012) found that the race organizers used a combination of informational and promotional messages to attract followers and share information about their upcoming events, and the race organizers gained followers on their Twitter profile early that further helped spread information about the events.

5.3.2.2 Student spectators’ experience of university sports games

The fourth dimension of the Decision-Making Process for Sport Involvement model is sport experience. This dimension highlighted student spectators’ overall experience of university sport. Sport experience was investigated in the following ways:

1. Student spectators were asked to answer questions with regards to their experience with the flow of traffic into the venue where university sports games were held and their experience of traveling to this venue.

2. Student spectators were asked to answer questions about their main experience at university sports games that considered signage directing student spectators, parking space, cleanliness of the facility, value of concessions such as food, snacks, and drinks, half-time entertainment, as well as the quality of the sound system.

3. Student spectators were asked to rate their experience with regards to the flow of traffic exiting the university sports’ venue and their experience of traveling from this venue.

Student spectators’ overall experience of university sports games gave rise to the following finding:

1. Student spectators reported a generally good overall experience of university sports games.
This finding indicates that most student spectators of university sport had a good overall experience. A study by Yoshida et al., (2013) set out to examine the relationship between service quality, core product quality, game and service satisfaction, and behavioural intentions of spectators at a professional baseball game in Japan and at two college football games in the United States. Findings of the aforementioned study supports the current investigation and concluded that the relationships between game atmosphere, game satisfaction, and behavioural intentions were statistically significant, strong, and consistent in both Japanese and American settings. In addition, facility functionality and behavioural intentions were highly evaluated by the United States spectators, furthermore suggesting that spectators had a positive experience at sports games. Furthermore, an elaborate attempt at improving student spectators’ overall experience at university sports games may include managing ancillary services that consists of stadium employees, facility layout, accessibility, seating comfort, and information signs (Yoshida & James, 2010). Existing research by Greenwall, Fink, and Pastore (2002) and Wakefield and Blodgett (1996) shows that managing these services may positively influence spectators experience at sporting events.

5.3.2.3 Student spectators’ feelings after attending university sports games

The fifth dimension of the Decision-Making Process for Sport Involvement model is evaluation of experience. This dimension took into account student spectators’ evaluation of their experience at university sports games. Evaluation of experience was investigated in the following way:

1. Student spectators were asked to select how they felt after they attended university sports games.

Student spectators’ evaluation of their experience at university sports games gave rise to the following finding:
Based on the options of excited, happy, sad, or bored, that were listed below the question, it was reported by student spectators that they felt happy after attending university sports games.

This finding clearly showed that student spectators evaluated their experience of university sports games and felt happy after attending these events. Research regarding how spectators felt after attending university sports games remains scarce, however, previous studies concluded several motivational factors that positively influence spectators’ attendance at sporting events. A study by Funk, Mahony, Nakazawa, and Hirakawa (2001) that researched sports spectators reported additional factors of the Sport Interest Inventory (SII) model such as bonding with family and entertainment value that could be considered as similar contributions to this current study that perpetuates feelings of happiness when attending sporting events. Another study by Hirvonen (2014) supports these factors by offering self-esteem enhancement, diversion from everyday life, and family ties as additional factors that may yield similar positive sentiments after attending sports games.

5.3.2.4 Student spectators’ satisfaction with university sport’s SNSs

The final dimension of the Decision-Making Process for Sport Involvement model is post-evaluation behaviour. This dimension highlighted student spectators’ post-evaluation behaviour of university sport. Post-evaluation behaviour considered student spectators’ feelings of satisfaction, dissatisfaction, or marginal satisfaction of university sports games in the following way:

1. Student spectators were asked whether they were satisfied with the updates posted on university sports’ SNSs.

Student spectators’ post-evaluation behaviour gave rise to the following finding:
Based on the options of never, seldom, sometimes, often, and always, that were listed below the question in the online survey, it was reported by student spectators that they were sometimes satisfied with the updates posted on university sports' SNSs.

This finding suggests that student spectators were marginally satisfied with the service of updating posts on university sports SNSs, alluding to possible experience improvements that could be initiated by University Sport. Since updating posts on university sports’ SNSs can be considered as a service university sport delivers to their consumers, student spectators, the finding of this current investigation is contradictory to service satisfaction previously researched. Studies by Tsuji, Bennett, and Zhang (2007), Greenwall, Fink, and Pastore (2002), Hill & Brown (2000), and Wakefield and Blodgett (1996) agreed that service quality, including reliability, assurance, empathy, responsiveness, and tangibles, predicts customer satisfaction.

5.3.3 CONCLUSIONS RELATED TO THE SUMMARY OF FINDINGS FOR DECISION-MAKING PROCESS FOR SPORT INVOLVEMENT MODEL

As mentioned in section 5.2.3 above, this section concludes the summary of findings as it relates to the theoretical framework that was used to shape this study, the Decision-Making Process for Sport Involvement model.

From the findings, it can be concluded that:

5.3.3.1 Student spectators’ awareness of university sports games

- Attendance of university sports games by student spectators was not based on the information shared on university sports’ SNSs.
5.3.3.2 Student spectators’ experience of university sports games

- Student spectators did not holistically enjoy university sports games. However, it is not known whether student spectators experienced the least enjoyment with traveling to the university sports venue, at the main experience, traveling from the university sports venue, or at all three these stages.

5.3.3.3 Student spectators’ feelings after attending university sports games

- Of the options presented to determine student spectators’ feelings after attending university sports games, student spectators were found to be happy after they attended university sports games.

5.3.3.4 Student spectators’ satisfaction with university sports’ SNSs

- The inquiry of student spectators’ satisfaction with university sports’ SNSs was neither definitively identified as satisfied or dissatisfied. Therefore, it is inconclusive whether student spectators were satisfied with university sports’ SNSs.

SECTION B CONCLUSION

Section B included the discussion, summary of findings, and conclusions relating to the Decision-Making Process for Sport Involvement model. Section B also concludes the discussion, findings, and conclusions relating to the two different sections presented in this chapter.

This chapter continues with the recommendations for practice and further research, limitations of the study, and the chapter ends with a study conclusion.
5.4 RECOMMENDATIONS

As various social media platforms gain traction in the world of sport, there will be an increased need for scholarly research done on SNSs to best understand why student spectators use these sites, the position student spectators hold in the overall landscape of social media, and how sport administration departments at higher education institutions may benefit from integrating a social media presence into the marketing strategies of university sports games. With this said, the following recommendations are being made on the basis of the findings with regard to the influence of SNSs on student spectator behaviour in university sport. Below are recommendations for practice and recommendations for further research.

5.4.1 Recommendations for practice

- In future, various content posted on all the different SNSs used by university sport should be examined to provide an improved understanding of how these sites can operate simultaneously while providing accurate information and current updates across all sites.

- It may be beneficial for sports administration departments at universities to conduct a needs analysis prior to developing social media marketing strategies, in order to determine what student spectators may be interested in with regards to university sport social networking sites.

- It is recommended that university sport develop marketing strategies and social media policies for the management of their SNSs well ahead of university sports games by building an interest in student spectators about university sports games. These marketing strategies on the university sports’ SNSs may include running competitions and winning tickets to attend university sports games, sharing memories of past games,
and incorporating student spectators into the marketing strategies by asking them to share their favourite moments of previous university sports.

- Improved online social media marketing strategies may encourage student spectators to interact with university sports games before they attend the games, as opposed to only during and after their attendance as founded in this study.

- To ensure student spectators continuously enjoy a positive overall experience at university sports games, it is recommended that additional consideration is provided to parking logistics, signage communication, stadium facility cleanliness, half-time entertainment, and the value of concessions.

- Further recommendations to ensure student spectators express loyalty toward university sport, trust of information shared on the university sports’ SNSs, and commitment to supporting university sports teams before, during, and after their attendance of university sports games include an improved online social media presence that is frequently active, current, and provides accurate information.

- Training and facilitation of online marketing and social media management is recommended for improved utility of social media platforms. Mastering these communication tools may assist in improved spectator participation, university sport culture and student morale centered around campus sport events.

5.4.2 Recommendations for further research

- Evidenced by this study, there is a need to conduct further investigations in order to ascertain the influence of the use of SNSs on student spectator behaviour in university sport, on a larger scale in South Africa. This current study encompassed two main variables, SNSs and student spectator behaviour, that included the examination of multiple layers such as the previously identified SNSs and student spectator behaviour
of attendance, loyalty, trust, and commitment, respectively, with regard to a number of relationships. A similar study may be conducted at a different higher education institution in South Africa as a comparison, to determine similarities and differences in these institutions regarding the use of SNSs to promote student spectator engagement with university sport.

- It is recommended that further research takes place by adopting a qualitative research approach, thus decreasing the number of participants in the study, however, seizing opportunities to ask participants follow-up questions that would lead to a broader and more detailed understanding of student spectators’ use of SNSs with regards to university sport. A qualitative research approach may provide the opportunity to further explore student spectators’ satisfaction of university sport, in an attempt to understand why some student spectators reported bad experiences. In contrast, it may be beneficial to explore why student spectators reported good experiences of university sport so that these areas can be strengthened and further developed.

- Further research is recommended through content analyses for the use of SNSs by both student spectators and university sports bodies to determine whether online social media strategies of university sport encourages student spectators to interact with university sports’ SNSs before, during, and after their attendance of university sports games.

5.5 LIMITATIONS OF THE STUDY

Although this study offers valuable insight into university students’ social media use and their spectator behaviour, it is not without limitations. A broad spectrum of results for this research was provided due to the diversity of the university students and their unique backgrounds, that participated in answering the online survey. However, sampling a university campus to
participate in this study could be viewed as a limitation of the research as young adults and university age students are considered to be more socially active and implanted in a culture of social media than people of other ages. The use of Likert scales could be viewed as a limitation as each item between 1 and 10 was not clearly defined or mentioned in the study. Respondents could interpret the answering options differently, for example, someone may think “often” means daily or multiple times per day, while some respondents may think that “once a week” may mean often. The length of the online survey may be considered a limitation since it could induce participant survey fatigue. Although this study employed the collection of cross-sectional data that was appropriate to meet the needs of this study, these data do not allow for investigation of any long-term influence of SNSs related to student spectator behaviour, thus no statistical inferences may be made to any other population, therefore these results are not generalizable.

5.6 STUDY CONCLUSION

This study presents an initial effort to provide an understanding of how SNSs mediate student spectator behaviour by presenting an examination of the role played by SNSs with respect to student spectator behaviour in the context of university sport. Inferences may be drawn from the findings with regards to SNSs used by students and the relationship between its use and their spectator behaviour. Although this study found that the use SNSs influenced student spectator attendance of university sports games, it is beneficial for sports administration departments at higher education institutions to consider updating their knowledge about this relationship to improve their online social media presence and ultimately increase and retain the attendance of student spectators.
REFERENCES


https://etd.uwc.ac.za


Church, K., & de Oliveira, R. (2013). What’s up with WhatsApp?: Comparing mobile instant messaging behaviors with traditional SMS. *15th International Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI’13),* 352–361.


APPENDICES

APPENDIX A: Information sheet

UNIVERSITY OF THE WESTERN CAPE
Private Bag X 17, Bellville 7535, South Africa
Tel: +27 21-959 2350 Fax: +27 21-959 3688
E-mail: kphillips@uwc.ac.za OR 3028685@myuwc.ac.za

INFORMATION SHEET

Please take a few minutes to complete this survey. Your responses will assist the researcher to better understand how the use of social networking sites influences student spectator behaviour at university sport. This project is part of the researcher’s Master’s thesis. Your participation in this survey is voluntary and there will be no negative consequences for you should you choose not to participate. If you do choose to participate, and wish to withdraw at any stage, you will be allowed to do so. No personally identifiable information will be reported, and you will remain anonymous throughout the process. Permission to conduct this survey has been obtained from the Humanities and Social Sciences Research Ethics Committee at the University of the Western Cape.

Project Title: The relationship between the use of social networking sites and student spectator behaviour: A case of university sport in the Western Cape.

What is this study about?
This is a research project being conducted by Kirby Phillips at the University of the Western Cape. We are inviting you to participate in this research project because you have been
identified as a potential student spectator of university sport. The purpose of this research project is to understand how to effectively use social networking sites for university sport.

**What will I be asked to do if I agree to participate?**

You will be asked to read and submit a consent form. You will be required to read and complete an online survey. This survey will be sent to you via your student e-mail account. This e-mail will include a link to the survey. Click on the link to access the survey. Please read and complete the questions. The overall duration of your participation in answering the questions is estimated at 10 – 15 minutes. Questions in the survey relates to social networking sites, student spectator behaviour, student spectator attendance of university sports games, student spectator loyalty to university sport, student spectator’s trust of information shared on university sports’ social networking sites, as well as student spectator commitment expressed toward university sport.

**Would my participation in this study be kept confidential?**

The researchers undertake to protect your identity and the nature of your contribution. To ensure your anonymity, the surveys are anonymous and will not contain information that may personally identify you. To ensure your confidentiality, the data collected for this study will be stored using password-protected files at the department of Sport Recreation and Exercise Science at the University of the Western Cape. If we write a report or article about this research project, your identity will be protected.

**What are the risks of this research?**

There may be some risks from participating in this research study. All human interactions and talking about self or others carry some amount of risks. We will nevertheless minimise such risks and act promptly to assist you if you experience any discomfort, psychological or otherwise during the process of your participation in this study. Where necessary, an appropriate referral will be made to a suitable professional for further assistance or intervention.

**What are the benefits of this research?**

This research is not designed to help you personally, but the results may help the investigator learn more about the relationship between the use of social networking sites and student spectator behaviour within university sport. We hope that, in the future, other people might benefit from this study through improved understanding of effectively using social networking sites to advance university sport.

https://etd.uwc.ac.za
Do I have to be in this research and may I stop participating at any time?
Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.

What if I have questions?
This research is being conducted by Kirby Phillips at the Department of Sport Recreation and Exercise Science at the University of the Western Cape. If you have any questions about the research study itself, please contact Kirby Phillips at: Department of Sport Recreation and Exercise Science, University of the Western Cape, Bellville, 7535; 021 959 2350; kphillips@uwc.ac.za or 3028685@myuwc.ac.za.

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Dr Marié Young
Head of Department: SRES
University of the Western Cape
Private Bag X17
Bellville 7535
myoung@uwc.ac.za

Prof Anthea Rhoda
Dean of the Faculty of Community and Health Sciences
University of the Western Cape
Private Bag X17
Bellville 7535
chs-deansoffice@uwc.ac.za
APPENDIX B: Consent form

UNIVERSITY OF THE WESTERN CAPE
Private Bag X 17, Bellville 7535, South Africa
Tel: +27 21-959 2350 Fax: +27 21-959 3688
E-mail: kphillips@uwc.ac.za OR 3028685@myuwc.ac.za

CONSENT FORM

Title of Research Project: The relationship between the use of social networking sites and student spectator behaviour: A case of university sport in the Western Cape.

The study has been described to me in language that I understand. My questions about the study have been answered. I understand what my participation will involve and I agree to participate of my own choice and free will. I understand that my identity will not be disclosed to anyone.

I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits.

Participant’s name…………………………

Participant’s signature……………………..

Date………………………………..
APPENDIX C: Survey

Section A: This section is about your demographic information.

1. What is your age? (Please select your age range)
   - 18 - 22
   - 23 - 27
   - 28 - 32
   - 33 - 37
   - 38+

2. What is your sex?
   - Male
   - Female

3. What is your ethnicity?
   - African
   - Coloured
   - Indian
   - White

3. In which year level are you currently registered?
   - Foundation year
   - First year
   - Second year
   - Third year
   - Fourth year
   - Honours
   - Masters
   - PhD

4. Which faculty are you currently registered in?
   - Arts
Community and Health Science
Dentistry
Economic and Management Science
Education
Law
Natural Science

5. Where do you live?
   On campus
   Off campus

6. Do you have internet access?
   Yes
   No

7. How do you access the internet? (You may select more than one option).
   ADSL
   3G dongle
   Mobile data
   Home WiFi
   University Campus WiFi
   Free WiFi at public libraries
   Free WiFi at shopping malls

Section B: This section is about your social networking sites.

8. Select the social networking site(s) for which you currently have a profile. (You may select more than one option).
   Facebook
   Twitter
   Instagram
   WhatsApp
   YouTube
9. Which electronic device do you use to access your social networking site(s)? (You may select more than one option).
   - Desktop Computer
   - Laptop
   - Smartphone
   - iPad
   - Android Tablet

10. How often do you visit your social networking site(s)?
    - Hourly
    - Daily
    - Weekly
    - Monthly
    - Never

11. What is the average time you spend on your social networking site(s) per day?
    - Less than 2 hours
    - 2-4 hours
    - 5-8 hours
    - More than 8 hours

12. Please indicate which of the following you have performed on your social networking site(s). (You may select more than one option).
    - Upload pictures
    - Upload video clips
    - Posted a status update
    - Expressed a feeling on Facebook
    - Sent an inbox message on Facebook
Read a comment on Facebook
Tag friends
Shared a post
Shared your location
Posted a tweet
Read a comment on Twitter
Retweeted a post
Sent a direct message on Twitter
Sent a direct message on Instagram
“Like” photos on Instagram

13. Select the university sport social networking site(s) you follow. (You may select more than one option).
@uwcsport
@uwconline
@varsitysports
@varsitysportssa
@varsitysportsSA
@USSAstudent
@ussastudent
Other

14. In your opinion, how important are social networks for university sport?

Not important | Very important
---|---
1 | 9
2 | 10
3 | 8
4 | 7
5 | 6
6 | 5
7 | 4
8 | 3

15. How important is it to you to interact with university sport on your social networking sites?

Not important | Very important
---|---
1 | 9
2 | 10
3 | 8
4 | 7
5 | 6
6 | 5
7 | 4

16. Rate your level of confidence when you are online.
I feel lost when I am online
I feel confident when I am online

1 | 9
2 | 10
3 | 8
4 | 7
5 | 6
6 | 5
7 | 4
8 | 3

https://etd.uwc.ac.za
17. Rate your feelings toward sharing things online.
   Sharing things online makes me nervous  I enjoy sharing things online
   1  2  3  4  5  6  7  8  9  10

18. Rate your excitement about using social networking sites.
   I feel anxious about using  I am excited about using
   social networking sites   social networking sites
   1  2  3  4  5  6  7  8  9  10

19. Rate your desire to interact with university sport on social networking sites.
   I do not wish to interact  I want to interact more with
   with university sport on SNSs   university sport on SNSs
   1  2  3  4  5  6  7  8  9  10

Section C: This section is about your spectator behaviour.

20. How do you feel before attending a university sports game?
   Excited
   Happy
   Sad
   Bored

21. How do you feel while attending a university sports game?
   Excited
   Happy
   Sad
   Bored

22. Please rate the following statements.
   N = Never  S = Seldom  ST = Sometimes  O = Often  A = Always
   I interact with social networking sites before attending university sports games.
   I interact with social networking sites while attending university sports games.
   I interact with social networking sites after attending university sports games
   I express my feelings on social networking sites before attending university sports games.
   I express my feelings on social networking sites while attending university sports games.
   I express my feelings on social networking sites after attending university sports games.
23. Before you attend university sports games, please indicate which of the following you perform. (You may select more than one option).
- Upload pictures
- Upload video clips
- Post a status update
- Express a feeling on Facebook
- Send an inbox message on Facebook
- Read a comment on Facebook
- Tag friends
- Share a post
- Share your location
- Post a tweet
- Read a comment on Twitter
- Re-tweet a post
- Send a direct message on Twitter
- Send a direct message on Instagram
- “Like” photos on Instagram

24. During your attendance at university sports games, please indicate which of the following you perform. (You may select more than one option).
- Upload pictures
- Upload video clips
- Post a status update
- Express a feeling on Facebook
- Send an inbox message on Facebook
- Read a comment on Facebook
- Tag friends
- Share a post
- Share your location
- Post a tweet
- Read a comment on Twitter
Re-tweet a post
Send a direct message on Twitter
Send a direct message on Instagram
“Like” photos on Instagram

25. Rate your experience with regard to travelling to the venue university sports games are held (1 being bad to 10 being excellent).

<table>
<thead>
<tr>
<th>Bad</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
</table>

26. Rate your experience with regard to the flow of traffic entering the venue (1 being bad to 10 being excellent).

<table>
<thead>
<tr>
<th>Bad</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
</table>

27. Rate your experience with the signage directing spectators to various areas (1 being bad to 10 being excellent).

<table>
<thead>
<tr>
<th>Bad</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
</table>

28. Rate your experience with regard to the parking space (1 being bad to 10 being excellent).

<table>
<thead>
<tr>
<th>Bad</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
</table>

29. Rate your experience with the cleanliness of the facility (1 being bad to 10 being excellent).

<table>
<thead>
<tr>
<th>Bad</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
</table>

30. Rate your experience with the value of concessions such as food, snacks, drinks (1 being bad to 10 being excellent).

<table>
<thead>
<tr>
<th>Bad</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
</table>

31. Rate your experience with the entertainment during half time of university sports games (1 being bad to 10 being excellent).

<table>
<thead>
<tr>
<th>Bad</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
</table>

32. Rate your experience with the quality of the sound system at the university sports games (1 being bad to 10 being excellent).

<table>
<thead>
<tr>
<th>Bad</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
</table>
33. Rate your experience with regard to the flow of traffic exiting the venue (1 being bad to 10 being excellent).

<p>| | | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

Bad | Excellent

34. Rate your experience with regard to travelling from the venue university sports games is held (1 being bad to 10 being excellent).

<p>| | | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

Bad | Excellent

35. Rate the level of enjoyment you experience while attending university sports games (1 being bad to 10 being excellent).

<p>| | | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

Bad | Excellent

36. Rate the possibility that you will attend university sports games in the future (1 being very unlikely to 10 being very likely).

<p>| | | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

Bad | Excellent

37. After you attend university sports games, please indicate which of the following you perform. (You may select more than one option)

- Upload pictures
- Upload video clips
- Post a status update
- Express a feeling on Facebook
- Send an inbox message on Facebook
- Read a comment on Facebook
- Tag friends
- Share a post
- Share your location
- Post a tweet
- Read a comment on Twitter
- Re-tweet a post
- Send a direct message on Twitter
- Send a direct message on Instagram
“Like” photos on Instagram

38. How do you feel after attending university sports games?
   Excited
   Happy
   Sad
   Bored

Section D: This section is about your attendance at university sports games.

39. Do you attend university sports games?
   Yes
   No

40. If you answered Yes to the question above, select the reason(s) you attend university sports games.
   I support university sport
   I support university sports teams
   Interact with other spectators and fans while attending games
   Share the experience of attending the game on my social networking site(s)
   Other

41. If you answered No to the question above, state the reason(s) you do not attend university sports games.
   I do not support university sport
   I do not support university sports teams
   I do not wish to interact with other spectators and fans while attending games
   I do not wish to share the experience of attending the game on my social networking site(s)
   Other

42. If you answered Yes to question one above, how often do you attend university sports games?
   Less than three games a year
   1 to 5 games a year
   6 to 10 games a year
More than 10 games a year

43. Do you attend university sports games based on information shared on the university sport social networking sites?
   Yes
   No

44. If you answered No to the question above, do you attend university sports games based on information found on:
   Posters
   Campus flyers
   Newspapers
   Radio
   Word-of-mouth
   Other

45. Which social networking site(s) do you interact with while attending university sports games? (You may select more than one option).
   Facebook
   Twitter
   Instagram
   WhatsApp
   YouTube
   Snapchat
   Google+
   Pinterest
   LinkedIn
   Other

46. What information do you share on your social networking site(s) while attending university sports games? (You may select more than one option).
   Upload pictures
   Upload video clips
   Post a status update
Express a feeling on Facebook
Send an inbox message on Facebook
Read a comment on Facebook
Tag friends
Share a post
Share your location
Post a tweet
Read a comment on Twitter
Re-tweet a post
Send a direct message on Twitter
Send a direct message on Instagram
“Like” photos on Instagram

47. Please rate the following statements.

<table>
<thead>
<tr>
<th>N</th>
<th>S</th>
<th>ST</th>
<th>O</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>Seldom</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
</tbody>
</table>

I am aware of the university sports games before reading about it on my social networking site(s).
I interact with social networking site(s) before attending university sports games.
I interact with university sport’s social networking site(s) before attending university sports games.
I interact with social networking site(s) while attending university sports games.
I interact with university sport’s social networking site(s) while attending university sports games.
I enjoy sharing my university sport experience on social networking site(s) while attending a game.
I connect with other spectators on social networking sites while attending a game.
I am satisfied with current updates posted on university sport social networking sites while I am attending a game.
I interact with social networking sites after I attend university sports games.
I interact with university sport’s social networking site(s) after I attend university sports games.

Section E: This section is about your loyalty.

48. Please rate the following statements:

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>
I would defend my favourite university sports team on my social networking site(s), even if it caused controversy.
I would follow my favourite university sports team on my social networking site(s) regardless of which team they play against.
I would watch a game regardless of which team university sports team play against.

Given a choice, I would increase the amount of time I spend interacting with university sport on my social networking sites.
The long-term success of university sport is important to me.

It is important to me that my favourite university sports team continues playing in major tournaments.
I would never switch my loyalty from my favourite university sports team even if my close friends were fans of another team.
I would rethink my loyalty to my favourite university sports team if management traded away its best players.
I might rethink my loyalty to my favourite university sports team if this team consistently performs poorly.
Being a fan of university sport is important to me.

Section F: This section is about your trust.
49. Please rate the following statements:

A = Strongly disagree   B = Disagree   C = Agree   D = Strongly Agree
I am confident that the information shared on the university sport social networking sites is accurate.
I am confident that the information shared on the university sport social networking sites is current.
I am confident that the information shared on the university sport social networking sites is reliable.
I rely on the university sport social networking sites to provide up-to-date information of sports games.
It is important for university sport to maintain ethical social networking sites.

I trust information shared by strangers on university sport social networking sites.
I trust information shared by friends on university sport social networking sites.

Section G: This section is about your commitment.
50. Please rate the following statements:

A = Strongly Disagree   B = Disagree   C = Agree   D = Strongly Agree
I am committed to interacting with university sport on my social networking site(s).

Win, lose, or draw, I am committed to sharing information about university sport on my social networking site(s).
I am committed to my favourite university sports team.

I am committed to interacting with university sports teams on my social networking sites.
I am committed to expressing my opinion of the university sports games on my social networking sites.
I am committed to expressing my support to my favourite university sports team on social networking sites regardless if my friends do not.
I am committed to interacting with university sport on social networking sites regardless if my favourite team lose.
My commitment to my favourite university sports team would decrease if they were performing poorly and there appeared little chance their performance would change.
Nothing could change my commitment toward supporting my favourite university sports team.
I could easily be persuaded to change my favourite university sports team preference.